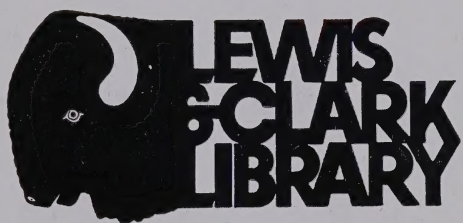
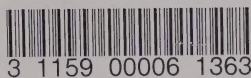


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MONTANA COLLECTION

April 22, 1966

Mr. N. J. Campeau
Members of the Joint City-County
Planning Board
Civic Center
Helena, Montana

Gentlemen:

We herewith submit for your final consideration and adoption the comprehensive plan for Helena. This report concludes the first phase of your planning program. We feel that this is not an end, but a beginning of efforts to set a direction for the improvement of a great city.

It has been a privilege and an honor to work with you in preparing this plan. We hope that our appreciation of the many hours of work you have put into this program will be matched by the people in the community, and that our joint efforts will bear fruit in direct action for community improvement; for that, after all, is our goal.

We appreciate, also, the work of city, county and state officials in their efforts to make this a good plan.

We look forward to working with you again in the next phases of the planning program.

Very truly yours,

Fred Utevsky
Planner in Charge

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THE COMPREHENSIVE PLAN

HELENA, MONTANA

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

ECONOMIC DATA AND POPULATION

ECONOMIC DATA
POPULATION

THE LAND USE PLAN

THE TRANSPORTATION PLAN

WATER UTILITIES

SCHOOLS
PARKS AND RECREATION

PUBLIC UTILITIES

1966

THE COMPREHENSIVE PLAN AND ITS IMPLEMENTATION

APPENDIX A -- HELAND LAND USE CLASSIFICATION

APPENDIX B -- LAND DEVELOPMENT OF AND A ZONING MAP

APPENDIX C -- IMPLEMENTATION FORECASTS

CONSULTING SERVICES CORPORATION

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Seattle, Washington

Project No. Montana P-11. Prepared under Contract for the Montana State Planning Board and the Helena City-County Planning Board. The preparation of this report was financed in part through the Urban Planning Grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

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SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

The Economy

- Employment in extractive industries will continue to decline in Lewis and Clark County, while employment in the service industries, such as finance and the professional services, will exhibit greater than average growth. There will also be substantial employment gains in manufacturing. Overall employment, for the working age population, will continue to increase.

Population

- There will continue to be net out-migration from Lewis and Clark County until 1970, after which the net migration will be negligible. County population will increase from 30,000 in 1965 to 39,000 in 1985. The population of Helena will increase from 21,800 in 1965 to 29,500 in 1985.

Land Use

- Fifty percent of Helena's land is now developed; the largest proportion, nearly seventy percent, is in residential and street use.
- Topography has forced an unnatural pattern on the Central Business District (CBD) and it is becoming obsolete. A detailed study and plan for revitalization of this area is needed.
- Dispersion of future commercial development should be discouraged. Highway-oriented businesses should be limited to more compact development and to fewer locations.
- Present light industry is favorably located. Future industrial growth should be encouraged in an industrial park east of the city limits.

- Future residential development in the hills should be on larger, contoured lots, with less land devoted to streets. Residential areas should be protected from commercial and industrial intrusions, and from heavy traffic hazards.
- A new civic and government center, and a historic area is proposed to be located at the southern end of the CBD, improving public services, assisting in renewal, and providing a new focus for the CBD.
- There should be a joint city-state plan for development of the Capitol area. The plan would emphasize retention of existing open space, and limitation of building heights around the Capitol dome.
- The area between Carroll College and Bausch Park should be restricted to public use, as should that part of tailings area intended for expansion of the golf course. Land between the freeway and the airport will be maintained as an open space reserve pending studies on the protection of airport approach zones.
- More land should be set aside for public, especially open space and recreational, uses.

Thoroughfares

- One of several proposals for an east-west freeway should be adopted to reserve a right-of-way for construction of this bypass when it becomes needed.
- A parkway is proposed to enclose the Helena urban area as a ring road. Sections of this parkway could be constructed as a scenic highway, adding to the pleasurable aspects of driving. The parkway would improve access to sections of Helena, particularly the Central Business District.
- Sections of Lyndale Avenue, 17th Street, and 11th Avenue are shown on the thoroughfare plan as arterials. Priority

should be given to construction and channelization of connecting streets. A series of collector streets are proposed to connect local access streets and arterials.

- Free public parking is gradually giving way to metered pay lots in Helena. A plan for downtown parking is necessary to allow the CBD to effectively compete with shopping centers. Developers should be required to supply off-street parking as appropriate to the expected need, in accordance with the minimum standards of the proposed zoning ordinances.

Public Facilities

- Municipal office and jail facilities are now overcrowded and inefficient. A new civic center should be built to meet the administrative office requirements and provide an adequate jail that meets federal standards. The jail, police, municipal court, and safety functions could be housed in a new public safety building as part of a civic center development.
- Fire protection is being improved by the construction of a station on the east side of the city. An additional training facility, improved hydrant distribution, increased water pressure and water line extension would augment the city's fire protection capability. A continuing review of measures to improve the city's fire protection rating may result in reduced insurance rates for all property owners.
- A citizen's group should be formed to study library needs and initiate a bond issue proposal for a new building when it is needed.
- Future school enrollment and classroom requirements have been forecasted to 1985. By that time, there will be a need for six more elementary schools, an additional junior high school, and either a second high school or an enlargement of the present one.

- Several of the elementary schools could be expanded to absorb some of the expected growth and to provide more efficient administrative units. The junior high school need could be met by either a new school or an addition to Ehler's Corners Elementary School.
- Long term planning and advance acquisition of sites is essential for the Helena School District in order to insure the availability of adequate site sizes in appropriate locations for future schools.
- An inventory of park and recreation areas indicates that Helena has a deficiency of land devoted to these uses. Open space is an integral part of the Montana heritage, and every effort must be made to maintain this heritage within the city.
- A detailed parks and playgrounds plan will be necessary to meet the estimated additional needs, within the city, of 34 acres of neighborhood playgrounds, 20 acres of community parks, 19 acres of community playfields, 67 acres of special facilities, plus neighborhood park and major urban park requirements. A state-county-city plan would allow appropriate and timely acquisition of regional park land, and would qualify the city for federal grants to help finance such facilities.

Utilities

- Helena has sufficient Missouri River water rights, supplemented by the Ten Mile and Hale systems, to meet any foreseeable need. In order to allow satisfactory distribution of water, the Ten Mile and Missouri systems should be interconnected, a filtration system should be installed on the Ten Mile supply, and another line should be added between the city and the Missouri filtration plant.
- A new high level storage reservoir on the east side of the city would open some outstanding view property for development.

- Helena has an excellent garbage collection schedule, but a sanitary landfill refuse site is needed to replace the present dumping facility. Enlargement of the sewage plant to provide secondary treatment of effluent may be necessary by 1970. Most of the unsewered sections of the city can be served with little difficulty by extending sewer lines, although pumps will be required in a few areas.

Comprehensive Plan Implementation

- The comprehensive plan is a guideline for future growth and community improvement, and should be refined to accommodate the results of additional studies. The plan is not a completed activity, but the beginning of a phase of community development and improvement.
- The zoning ordinance is a major element of implementation of the land use plan. As administered by the Building Inspector, the Board of Adjustment and the Planning Commission, the ordinance should make sure that land development is consistent with community goals. Subdivision regulation and urban renewal can also be used to implement the land use plan.
- The most immediate concern for implementation of the thoroughfare plan is the completion of east-west cross connections, and the establishment and acquisition of thoroughfare rights-of-way. Montana State legislation for a mapped streets or official map ordinance is recommended as another helpful tool in plan implementation.
- Proper subdivision regulations can greatly assist the implementation of the thoroughfare plan in developing areas.
- Selective street closing or rerouting of traffic may be necessary to eliminate traffic hazards in established residential areas.

- A capital improvements program should be adopted to aid in the orderly acquisition of land and development of public facilities. The program would analyze financial resources and schedule financing of public improvements by order of priority.
- An alert and informed City-County Planning Board is vital for continuous planning of community development and timely action to carry out plans. Legislative bodies should consult the Board in matters of development and public works' policy. The agreement of all public agencies is necessary to provide the best public service facilities at minimum cost.

ECONOMIC BASE AND POPULATION

ECONOMIC BASE

Introduction

Analysis of an area's economic health is an important basis for urban community planning. The potential of the economy indicates the number of jobs that will be available which will, in turn, affect the size of the population for which services are to be planned. Furthermore, the growth of economic activities will determine the needs for land that these activities will utilize. Another implication of the economic study concerns the tax base that will be provided by business. This section of the comprehensive plan report summarizes the economic studies and describes their significance.

Review of the trends and patterns in employment is an effective means for evaluating a region's economic base. In this section, 1950 and 1960 employment data for Helena and Lewis and Clark County are studied and related to comparable employment data for the State of Montana. Helena's employment characteristics are also compared with those of other large cities in the State.

Employment in Montana

Table 1 lists the total number of employed persons in Montana, Lewis and Clark County, and Helena by major industrial groups. The lower part of this table is a breakdown of employment per thousand population, and shows more clearly the relative importance of the various categories of employment. In the State of Montana, total employment, per thousand, in 1960 was lower than in 1950. The most spectacular change in the percentage of employment occurred in the three major categories that experienced an absolute employment decline: (1) agriculture, fisheries, and forestry, (2) mining, and (3) transportation. The relative increase in professional services (including education and medicine) was from 33 to 46 jobs per thousand population. In other categories, the employment level per thousand remained

Table 1

1950-1960 Employment by Industry Group

	Total Employment				Lewis & Clark Co.				Helena			
	Montana		1950		1950		1960		1950		1960	
	1950	1960	1950	1960	1950	1960	1950	1960	1950	1960	1950	1960
TOTAL:	218,180	231,270	10,537	11,746	7,821	8,811						
Agr., Fish., For.	54,913	40,844	907	764	107	113						
Mining	9,301	6,782	172	66	65	27						
Construction	14,772	14,911	1,058	978	773	758						
Manufacturing	18,681	23,439	952	959	578	612						
Transportation	17,306	13,990	551	361	472	280						
Communications	2,254	3,606	349	607	325	529						
Utilities	3,205	3,417	189	139	125	77						
Wholesale Trade	6,195	7,465	198	225	180	183						
Retail Trade	35,219	39,629	1,746	1,867	1,429	1,427						
Fin., R.E., Ins.	5,006	8,035	588	813	555	709						
Bus. & Repair Service	5,849	4,737	316	209	278	164						
Personal Service	10,383	13,757	532	747	439	586						
Entertainment & Rec.	1,697	1,851	89	131	70	116						
Professional Service	19,664	31,106	1,306	2,037	1,056	1,728						
Public Administration *	10,101	12,590	1,473	1,620	1,308	1,314						
Industry not reported	3,634	5,111	111	223	61	188						

Employment Per Thousand Persons

	Employment Per Thousand Persons				Employment Per Thousand Persons				Employment Per Thousand Persons			
	Montana		1950		1950		1960		1950		1960	
	1950	1960	1950	1960	1950	1960	1950	1960	1950	1960	1950	1960
TOTAL:	369	343	429	419	445	436						
Agr., Fish., For.	93	60	37	27	9	5						
Mining	16	10	7	2	3	1						
Construction	25	22	43	35	44	38						
Manufacturing	32	35	39	34	33	30						
Transportation	29	21	22	13	27	14						
Communications	4	5	14	22	18	26						
Utilities	5	5	8	5	7	4						
Wholesale Trade	10	11	8	8	10	9						
Retail Trade	60	59	71	67	81	71						
Fin., R.E., Ins.	8	12	24	29	31	35						
Bus. & Repair Service	10	7	13	7	16	8						
Personal Service	18	20	22	26	25	29						
Entertainment & Rec.	3	3	3	5	4	6						
Professional Service	33	46	53	73	60	86						
Public Administration *	17	19	60	58	74	65						
Industry not reported	6	8	5	8	3	9						

Source: U.S. Census 1950 and 1960

(*) Does not reflect total number of workers in governmental agencies; many are classified under professional services and other S.I.C. classifications.

relatively constant. It would appear that the decline in overall employment per thousand is due principally to the sharp decline in the basic (extractive) employment categories. Excluding agriculture, forestry, fisheries, and mining, total employment in Montana grew from 260 to 273 jobs per thousand population. Thus, the number of non-extractive jobs increased at a faster rate than did the population. The fact remains, however, that these increases have not been sufficient to maintain the 1950 level of total employment per thousand persons.

The significance of these statistics should not be exaggerated, and the employment data presented here does not necessarily lead to the conclusion that total employment per thousand will continue to decline. On the contrary, if the total population in Montana in 1950 and 1960 is broken down by age groups, it can be shown that the percentage of employment for persons between 14 and 65 years of age (the working age groups) has substantially increased in the ten-year period. Therefore, the overall reduction in employment per thousand population is also due to changes in population age composition.

Employment in Lewis and Clark County and Helena

Table 1 also shows the 1950 and 1960 employment data for Lewis and Clark County and the City of Helena. In comparison to state averages, the employment level per thousand in Lewis and Clark County is unusually high. The county has been less affected than the state by decline in agricultural employment, and has made substantial employment gains in communications, finance, insurance and professional services.

The decline in total employment per thousand, therefore, was less in Lewis and Clark County than in the state as a whole. The high total level of employment in Lewis and Clark County is in contrast to the relatively low level of employment in several industries, such as agriculture, mining, transportation, manufacturing, and wholesale trade. High levels of employment were found in construction, communications, finance, insurance and real estate, professional services, and public administration.

Absolute Employment Change: 1950 - 1960

This section describes changes in total employment in terms of economic growth. Table 2 presents the absolute change in employment between 1950 and 1960 by major industry groups.

Gross employment increase in Montana, over the ten-year period, amounted to 34,106 jobs or 15.6%, and was offset by losses in four categories amounting to 9.6%, for a net increase of 6.0%. Lewis and Clark County experienced absolute losses in the same four categories as the State of Montana, plus the categories of construction and utilities. The total decrease for the county, however, was a smaller percentage than for Montana as a whole. Net employment gain in Lewis and Clark County was 1,209 jobs, or 11.5% of the 1950 level.

The trends in employment, illustrated in table 2, should be examined carefully for they reveal the changes in the structure of the local economy. These figures show that the state's important employment increases were in the communications, finance, insurance and real estate, and professional services industries. Its losses were in: agriculture, fishing, and forestry; mining; transportation; and business and repair services. In Lewis and Clark County, the main increases were in the same industries as the state, except that personal services and entertainment and recreational employment also increased substantially. The county declined in employment in the same industries as the state, and also in the utilities and construction industries.

Labor Force Characteristics

Composition, by age and sex, of the labor force in 1960 is illustrated in table 3 for Montana and Lewis and Clark County. The three most important differences between the characteristics of the state and county labor force are:

1. The rate of unemployment was significantly higher in the state.
2. The proportion of females in the labor force was higher (38.8%) in Lewis and Clark County than in the state as a whole (28.9%).

Table 2

1950 - 1960 Employment Change
(Parentheses indicate declines)

	<u>Montana</u>		<u>Lewis & Clark Co.</u>	
	<u>Number</u>	<u>Per cent</u>	<u>Number</u>	<u>Per cent</u>
Agri., Fish, For.	(14,069)	(25.6)	(143)	(15.7)
Mining	(2,519)	(27.1)	(106)	(61.6)
Construction	139	0.9	(80)	(7.6)
Manufacturing	4,758	25.5	7	0.7
Transportation	(3,316)	(19.2)	(190)	(34.5)
Communications	1,352	59.9	258	73.9
Utilities	212	6.6	(50)	(26.3)
Wholesale Trade	1,270	20.5	27	14.2
Retail Trade	4,410	12.5	121	6.9
Fin., R. E., Ins.	3,029	60.6	225	38.3
Bus. & Repair Serv.	(1,112)	(19.0)	(107)	(33.8)
Personal Service	3,374	32.5	215	40.4
Entermt. & Rec.	154	9.1	42	47.2
Professional Serv.	11,442	58.2	731	56.0
Pub. Admn.	2,489	24.6	147	10.0
Ind. not rep'd.	1,477	40.6	112	100.0
 Increase	 34,106	 15.6	 1,885	 17.9
Decrease	<u>21,016</u>	<u>9.6</u>	<u>676</u>	<u>6.4</u>
 Net Increase	 13,090	 6.0	 1,209	 11.5

Table 3

1960 Labor Force

Montana, Lewis and Clark County
By Age Group and Sex

	<u>Total</u>	<u>% of Total</u>	<u>Male</u>	<u>Male as % of Total</u>	<u>Female</u>	<u>Female as % of Total</u>
<u>Montana</u>						
Total Employed	231,270		163,207		68,063	
Unemployed (6.8%)	<u>16,803</u>		<u>11,511</u>		<u>5,292</u>	
Total						
Civilian Labor Force	248,073		174,718		73,355	
Armed Forces	<u>6,328</u>		<u>6,303</u>		<u>25</u>	
Total Labor Force	<u>254,401</u>		<u>181,021</u>	<u>71.1%</u>	<u>73,380</u>	<u>28.9%</u>
Age 14-24 Years	46,811	18.4%	30,436	65.0	16,375	35.0
25-34 "	50,424	19.8	38,890	77.1	11,534	22.9
35-44 "	58,357	22.4	41,856	71.7	16,501	28.3
45-64 "	84,091	33.1	59,001	70.2	25,090	29.8
Over 65 "	14,718	5.8	10,838	73.6	3,880	26.4

Lewis and Clark County

Total Employed	11,746		7,145		4,601	
Unemployed (5.0%)	<u>617</u>		<u>417</u>		<u>200</u>	
Total						
Civilian Labor Force	12,363		7,562		4,801	
Armed Forces	<u>24</u>		<u>24</u>		<u>-</u>	
Total Labor Force	<u>12,387</u>		<u>7,586</u>	<u>61.2%</u>	<u>4,801</u>	<u>38.8%</u>
Age 14-24 Years	2,141	17.3%	1,169	54.6	972	45.4
25-34 "	2,309	18.6	1,560	67.6	749	32.4
35-44 "	2,951	23.8	1,905	64.6	1,046	35.4
45-64 "	4,211	34.0	2,503	59.5	1,708	40.6
Over 65 "	775	6.3	449	57.9	326	42.1

3. The labor force participants in Lewis and Clark County were generally older than those in the state; that is, there is a greater distribution of employment in the older age groups in the county than in the state.

Employment Forecast

The kinds of employment, the relationship of population to labor force, and the different trends in employment by industry indicate the directions of future change. As expected for the nation, the principal growth should be in the service industries. Employment declines in the extractive industries will continue, though at a lower rate because of the necessity of some minimum production level. Also, it is expected that the manufacturing employment base will become stronger, reducing the present imbalance as compared to the United States and the region. Table 4 provides projected employment data, as illustrated in figure 1, for Lewis and Clark County. The employment projections suggest the basis for population change in the county and in the city; the implications of this population change are described in the following section of this report.

Table 4

Lewis and Clark County Employment Increase 1960-1980
(Parentheses denote decrease)

	<u>1960</u>	<u>1960-70</u> <u>Increase</u>	<u>1970</u>	<u>1970-80</u> <u>Increase</u>	<u>1980</u>
Agric., Fish, For.	764	(64)	700	(100)	600
Mining	66	(26)	40	-	40
Construction	978	-	978	40	1,018
Manufacturing	959	50	1,009	400	1,409
Transportation	361	(11)	350	50	400
Communication	607	150	757	150	907
Utilities	139	-	139	50	189
Wholesale Trade	225	40	265	50	315
Retail Trade	1,867	140	2,007	150	2,157
Fin., R.E., Ins.	813	175	988	200	1,188
Bus. & Repair Serv.	209	-	209	100	309
Personal Serv.	747	180	927	150	1,077
Entertnm. & Rec.	131	40	171	50	221
Professional Serv.	2,037	500	2,537	450	2,987
Public Admn.	1,620	170	1,790	200	1,990
Industry not rep'd.	<u>223</u>	<u>100</u>	<u>323</u>	<u>200</u>	<u>523</u>
 TOTAL	 11,746	 1,444	 13,190	 2,140	 15,330

LEWIS & CLARK COUNTY EMPLOYMENT PER 1000

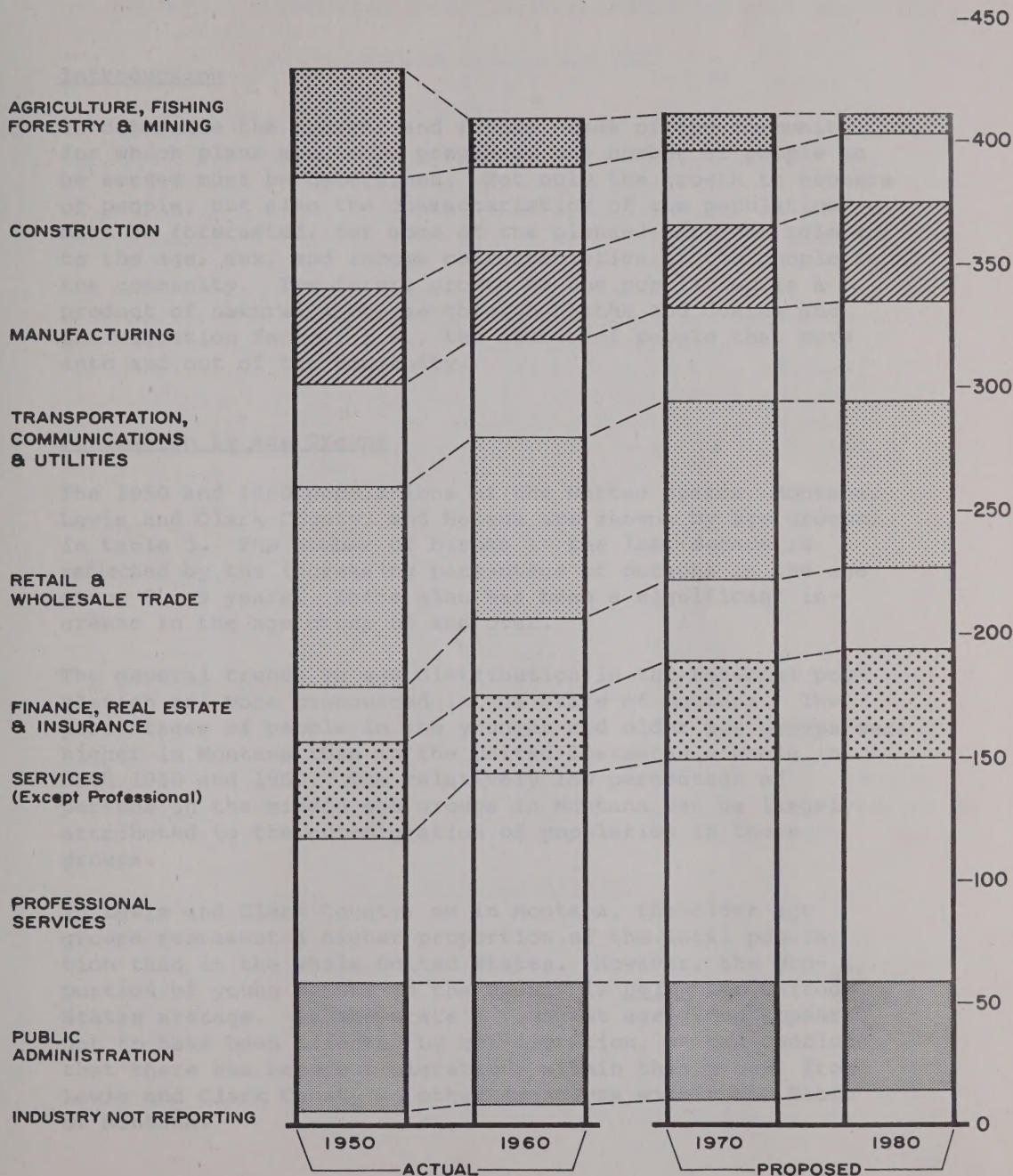


FIGURE I

POPULATION

Introduction

To determine the present and future needs of the community for which plans are to be prepared, the number of people to be served must be determined. Not only the growth in numbers of people, but also the characteristics of the population must be forecasted, for some of the planned services relate to the age, sex, and income characteristics of the people in the community. The future growth of the population is a product of natural increase through births and deaths and the migration factor, i.e., the number of people that move into and out of the community.

Population by Age Groups

The 1950 and 1960 populations of the United States, Montana, Lewis and Clark County, and Helena are shown, by age groups, in table 5. The number of births in the last decade is reflected by the increasing percentage of persons in the age group 0 - 9 years. There also has been a significant increase in the age group 65 and over.

The general trends in age distribution in the national population are more pronounced in the State of Montana. The percentages of people in the younger and older age groups were higher in Montana than in the United States as a whole in both 1950 and 1960. The relatively low percentage of persons in the middle age groups in Montana can be largely attributed to the out-migration of population in these groups.

In Lewis and Clark County, as in Montana, the older age groups represent a higher proportion of the total population than in the whole United States. However, the proportion of young people in the county is below the United States average. As the state's youngest age group appears not to have been affected by out-migration, we can conclude that there has been out-migration, within this group, from Lewis and Clark County to other locations within the State of Montana.

TABLE 5

Age Distribution for Population of
United States, Montana, Lewis and Clark County, Helena
1950-1960

<u>Age Group</u>	<u>United States</u> (000's)	<u>Montana</u>	<u>Lewis and Clark County</u>	<u>Helena</u>
<u>1950 Population by Age Group</u>				
0 - 9 years	29,505	123,558	4,680	3,326
10 - 19 "	21,839	87,174	3,409	2,293
20 - 29 "	23,855	85,897	3,406	2,557
30 - 39 "	22,867	88,353	3,865	2,805
40 - 49 "	19,342	69,712	3,157	2,269
50 - 64 "	21,622	85,466	3,798	2,695
65 and over	12,295	50,864	2,225	1,636
Total:	151,325	591,024	24,540	17,581

<u>Percentage Breakdown</u>				
0 - 9 years	19.5%	20.9%	19.1%	18.9%
10 - 19 "	14.4	14.8	13.9	13.1
20 - 29 "	15.8	14.5	13.9	14.5
30 - 39 "	15.1	14.9	15.7	16.0
40 - 49 "	12.8	11.8	12.9	12.9
50 - 64 "	14.3	14.5	15.5	15.3
65 and over	8.1	8.6	9.0	9.3
Total:	100.0%	100.0%	100.0%	100.0%

<u>1960 Population by Age Group</u>				
0 - 9 years	39,012	160,360	6,058	4,279
10 - 19 "	29,993	118,297	4,905	3,462
20 - 29 "	21,670	78,876	3,020	2,253
30 - 39 "	24,430	84,741	3,548	2,565
40 - 49 "	22,479	82,537	3,635	2,631
50 - 64 "	25,178	86,182	3,956	2,916
65 and over	16,561	63,774	2,884	2,121
Total:	179,323	674,767	28,006	20,227

<u>Percentage Breakdown</u>				
0 - 9 years	21.8%	23.8%	21.6%	21.1%
10 - 19 "	16.7	17.5	17.5	17.1
20 - 29 "	12.1	11.7	10.8	11.1
30 - 39 "	13.6	12.5	12.7	12.7
40 - 49 "	12.6	12.3	13.0	13.0
50 - 64 "	14.0	12.8	14.1	14.4
65 and over	9.2	9.4	10.3	10.5
Total:	100.0%	100.0%	100.0%	100.0%

The age distribution of the population in the City of Helena is substantially the same as that for Lewis and Clark County. In the older age groups the percentage is slightly higher and in the younger groups slightly lower than for Lewis and Clark County, which is a normal difference between urban and less urbanized areas.

Population Migration and Mobility

For the United States, though there is some immigration, the birth rate and the death rate are the primary factors which determine population growth and the relative size of certain age groups.

For regions and states, and especially smaller areas such as counties, the migration factor has a significant influence on the rate of growth and age distribution of the population. For purposes of this discussion, migration is here defined as population change not attributable to natural increase (births minus deaths). The difference between the number of families entering or leaving an area, determines whether there is net in-migration or out-migration.

In order to study the effect of migration on the population of Lewis and Clark County, migration by age group was analyzed and is shown in table 6.

Table 6

Lewis and Clark County Net Migration by Age Group

<u>Age Group</u>		<u>1950</u>	<u>1950-1960</u>			<u>1960</u>
<u>1950</u>	<u>1960</u>	<u>Pop.</u>	<u>Births</u>	<u>Deaths</u>	<u>Migration</u>	<u>Pop.</u>
	0-9		+7,035	- 165	-812	6,058
0-9	10-19	4,680	-	35	+260	4,905
10-19	20-29	3,409	-	30	-359	3,020
20-29	30-39	3,406	-	33	+175	3,548
30-39	40-49	3,865	-	125	-105	3,635
40-54	50-64	4,445	-	415	- 74	3,956
55-Over	65-Over	4,735		-1,958	+134	2,884
TOTAL		24,540	7,035	-2,788	-781	28,006

The net out-migration from the county is particularly strong in the group containing young adults and in the group containing children born during the decade. In the second age group, who were 0-9 in 1950 and 10-19 in 1960, the net effect of migration is an increase, a reflection of the tendency for parents (30-39 in 1960) of these children to remain in the county. The net increase of persons in the 30-39 age group in 1960 is, however, offset by decreases in the next two older groups.

Population Forecasts

Population forecasts to the year 1985 have been developed on the basis of (a) historical growth trends, (b) birth and death rates, (c) migration, and (d) local employment trends and projections. Although these factors are very strongly interrelated, they are described separately to illustrate detail in methodology. These forecasts are based on assumptions which should be reviewed periodically in the future. They are considered realistic on the basis of currently available data and growth indicators, but, since they are to be used as a basis for planning of future development and facilities, care has been taken not to understate the growth capacity of the Helena area. The forecasts are not, however, to be considered as maximum attainable population levels.

A general range of population forecasts was determined, first, by an examination of the past relationships of city and county population to that of the state and the United States. Since the U.S. Census Bureau projections are made in several different series, each of which is based on separate assumptions of birth rates and fertility, the projections applied to Montana, Lewis and Clark County and Helena yield a range of future population estimates. On this basis, the population of Lewis and Clark County would be between 31,000 and 32,200 for 1970, and from 35,900 to 39,800 for 1985.

Births, Deaths and Migration in Lewis and Clark County

To refine the population forecasts within the general range described, consideration had to be given to the specific factors affecting population growth. Results of a study of the county birth rates, death rates, age of population, number of women in the childbearing ages, etc., and the estimated changes in these factors, are tabulated below.

Table 7

Changes in Population Factors, 1960 - 1980

1960 - 1970	Estimated Births	7,200
	Estimated Deaths	<u>-2,950</u>
	Increase	4,250
	Net Out-Migration	<u>- 850</u>
	Net Increase	3,400
1970 - 1980	Estimated Births	8,450
	Estimated Deaths	<u>-3,350</u>
	Increase	5,100
	Net Out-Migration	None

In this table, the net migration for 1960 to 1970 is assumed to be about the same as it was from 1950 to 1960. For the period of 1970 to 1980, it was assumed that there would be no net migration due to expected improvement in the employment base. Application of the changes estimated above yields the following population estimates for Lewis and Clark County.

<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>
30,000	31,400	33,800	36,500	39,000

Without expected employment increases, the population growth forecasted would not take place, although there is room for some population growth without growth of employment. This possibility is illustrated by past changes in rates of employment, wherein, due to a larger percentage of aged and very young persons, population increased without a concomitant increase in employment. Thus, the projected population levels can be attained even if the employment increases fall below the projected figures, since the employment per thousand population is already higher than national and state averages.

The projected population can be distributed among age groups only in the form of rough estimates, which are of value for subsequent planning even in this rough form. The distributions are summarized in table 8:

Table 8

Lewis and Clark County Population
By Age Groups 1960-1970-1980

*Pre
School
Program*
1980

	<u>1960</u>	<u>1970</u>	<u>1980</u>
0-9 Years)	6,058	6,750	8,150)
10-19 Years)	4,905	6,300	7,400)
20-29 Years	3,020	4,000	5,200
30-39 Years	3,548	3,050	4,100
40-49 Years	3,635	3,300	3,100
50-64 Years	3,956	4,400	4,600
65 and over)	<u>2,884</u>	<u>3,600</u>	<u>3,950</u> /
TOTAL	28,006	31,400 ✓	36,500

Helena Population Forecast

Helena's population has been forecasted as a percentage of that of Lewis and Clark County. The city's share of county population has increased from 68% in 1940 to 72% in 1960. It is assumed that this increase will continue in the future, and yield the following projected population for Helena:

Table 9

Population Growth, City of Helena, 1960-1985

	<u>Lewis and Clark County</u>	<u>Helena</u>	
	<u>Projected Population</u>	<u>Percent of County</u>	<u>Population</u>
1960	28,006	72.2	20,227
1965	30,000	72.6	21,800
1970	31,400	73.0	22,900
1975	33,800	73.8	24,900
1980	36,500	74.6	27,200
1985	39,000	75.5	29,500

Of the county's projected population increase of 11,000 between 1960 and 1985, about 9,000 has been assigned to the city and immediately surrounding urban area.

The Population Study

The population analysis and forecast is the element of the comprehensive planning study upon which all of the plans are built. It is important as a guide to economic activity, community facilities and standards, and to land use planning and zoning.

The population data for analysis have been derived from the census reports and other conventional sources. Estimates and assumptions have yielded figures which are not intended to be accurate down to the last single unit, but are within a reasonable range of accuracy to the extent that the basic data allow. The significant point to be kept in mind is that the projections are at least as accurate as the other general guidelines needed for the overall planning function. They are as good as the use to be made of them necessitates.

THE LAND USE PLAN

Introduction

In May of 1965, Consulting Services Corporation conducted a study of all land uses in Helena. Each parcel of land was examined and classified by land use type. The purpose of the land use study was to survey and analyze current uses of the land within Helena and to project future uses and needs. This study and those of economics and population provide the background information essential to the development of an effective comprehensive plan for Helena. Analysis of present patterns of development and their interrelationships and problems, provides the basis for the development of a land use plan that will provide for the greatest efficiency and lasting benefit for the community as a whole.

Projections of land use needs, utilizing future employment and population levels, as developed in the economics and population studies, are made to determine future requirements for the various types of land uses. These projections present a summary of Helena's land use as it will be in 1985, if the current trend in land use development continues.

A recommended 1985 land use distribution and a land use plan, is presented, utilizing the results of other planning studies as well as the results of the land use analysis.

The land use plan, an important element of a community's comprehensive plan, translates a city's objectives for the future into a general guide for both public and private planning and development. It provides a guide to public development by establishing types and intensities of development toward which public utilities and services planning can be oriented. It provides a guide to intelligent private development through use of zoning controls which provide a legal tool for implementation of the land use plan, guiding the right type and intensity of development into the right places.

To be effective, the land use plan must work with all other elements of the comprehensive plan, i.e., the plans for thoroughfares, and for public facilities and utilities. Each must complement and reinforce the other. Otherwise, the objectives of the city toward a better future will not be met and the planning program will have been a waste of time, money, and the efforts of the public bodies that helped to put it together.

Present Land Use in Helena

About one half of Helena's total land area is now developed, but, due to topographical restrictions, only about 30% of the remainder remains potentially developable. The following table shows the amount of land in each of the major land use categories:

Table 10

1965 Land Use by Major Category in Helena

	<u>Acres</u>	<u>Percentage</u>
Residential	915	32.3 %
Commercial	187	6.6
Industrial (Excl. R.R.)	37	1.3
Public and Quasi-Public	187	6.6
Streets and Highways	1,042	36.7
Railroad R/W	328	11.6
Open Space	<u>140</u>	<u>5.0</u>
Total Developed	2,836	100.0 %

The locations of the land uses tabulated above are shown in figure 2, and the major categories are discussed below.

Commercial development has experienced an unnatural form of growth due to topographical barriers. Helena's Central Business District (CBD) may have served the community very well in the past, but today, in view of circulation, parking, and other problems, its inadequacy is quite apparent. In the past few years, other commercial centers have developed away from the CBD, and unless shortcomings of the CBD are alleviated, continuing dispersion will occur. Outlying

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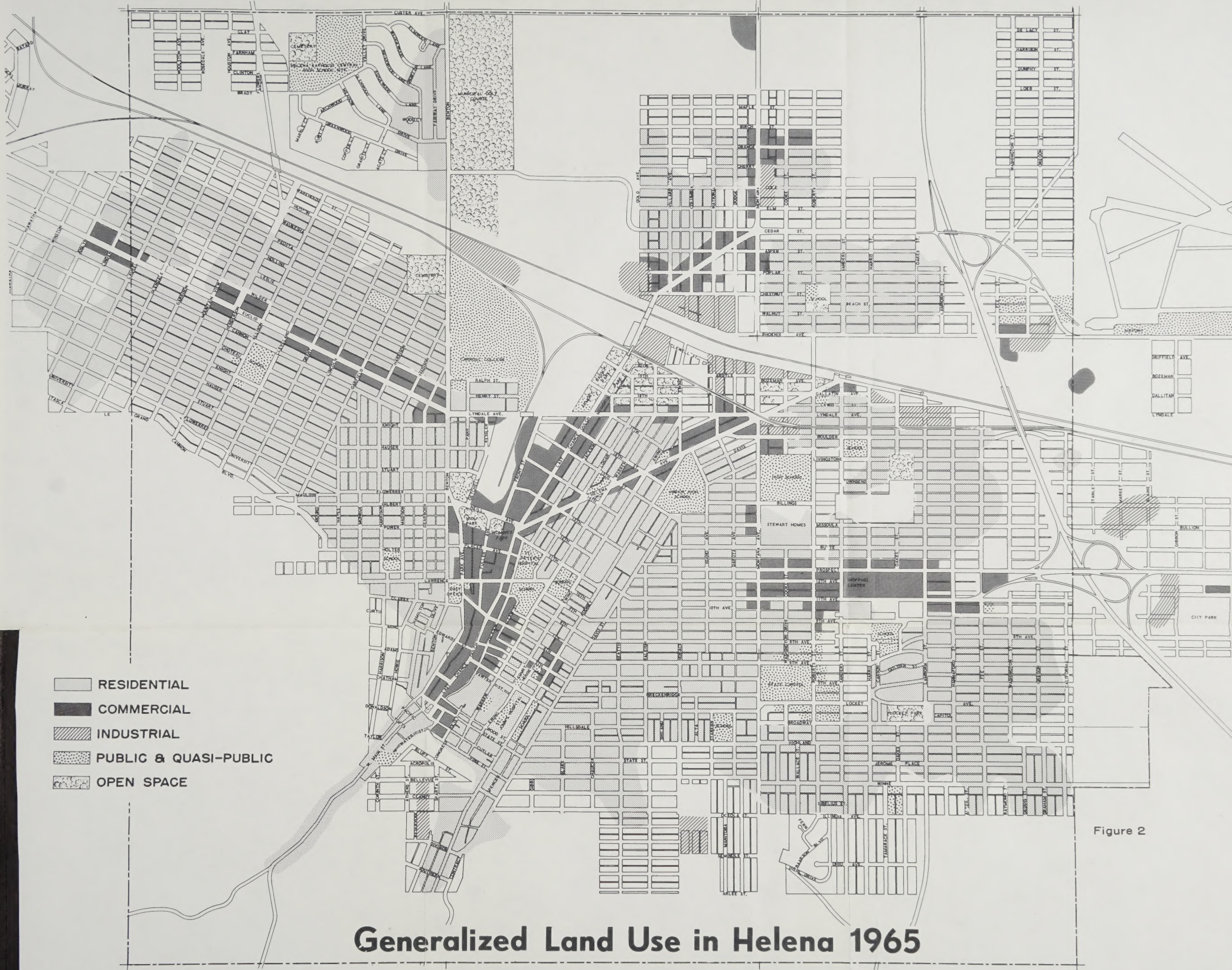


Figure 2

Table 11

City of Helena
Comparative Land Use Data

<u>Land Use</u>	<u>Percent of Developed Area</u>					
	<u>Helena</u>	<u>Norms *</u>	<u>Central City Average *</u>	<u>Eugene Oregon **</u>	<u>Klamath Falls **</u>	<u>Medford Oregon **</u>
Residential	32.2%	40.0%	39.6%	25.6%	40.2%	43.8%
Commercial	6.6	3.0	3.3	4.2	4.8	5.2
Industrial	1.3	7.0	6.5	4.7	11.3	3.3
Public and Quasi-Public	6.6	10.0	10.9	2.1	11.2	11.8
Streets and Highways	36.7	30.0	28.1	39.4	25.4	26.0
Railroad Right-of-Way	11.6	4.0	4.9	4.7	1.6	3.9
Open Space	5.0	6.0	6.7	19.3	5.5	6.0
Total Developed	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<u>Acres Per 1,000 Persons</u>						
Residential	42	30		32	46	
Commercial	9	2		5	5	
Industrial	2	5		6	13	
Public and Quasi-Public	9	8	N.A.	3	13	N.A.
Streets and Highways	48	27		50	29	
Railroad Right-of-Way	15	4		6	2	
Open Space	6	6		2	6	
Total Developed	131	82		104	116	

Population at Time of Survey

21,800	46,482	19,000	23,500
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(* - Haar, Land Use Planning
(**- Bur. of Munic. Res., Land Use in 33 Oregon Cities.)

commercial areas should be allowed only when they are consistent with the overall development plan for the city.

Industrial land uses are generally concentrated in the center of the city, between the Great Northern and Northern Pacific railroads, with one other concentration just to the east of the city limits. The present central location of light industrial uses is served by excellent rail and highway access, and is sufficiently segregated from major residential areas.

Public and quasi-public uses include Carroll College and the State Capitol, with other governmental and religious uses concentrated near the central area. Educational land, which is discussed in detail in the public facilities section, is distributed throughout the city.

Open space, two thirds of which is the golf course, comprises only about 2 1/2 percent of the total city area. Other major open space uses are the Kiwanis and Memorial Parks.

Residential and street uses account for two thirds of the developed land. Residential development extends to the city limits on the north, east, and west of the central business district, with most of the recent growth having occurred to the southeast. Multi-family residential uses are generally intermingled with present single-family areas around the CBD and between the CBD and the State Capitol.

Comparative Land Use

Table 11 offers a comparison of Helena land use to established norms and land use in other cities. The comparison suggests the following directions for the land use plan to take:

1. Helena has too large a percentage of land zoned for commercial development. Such zoning tends to encourage uneconomical dispersion of business, while reducing the land's usefulness for residential purposes.
2. Helena is not an industrially oriented city and has a small percentage of industrial land, but it is expected that the land requirements of industry will increase in the future.

3. The large amount of railroad right-of-way is expected to diminish. The railroads are already trying to encourage new industrial plants on railroad property.
4. Helena has a small percentage of open space. The requirements in this area will later be discussed in detail.

Analysis by Areas Within the City

Helena land uses and their interrelationships were analyzed in detail for nine sub-areas within the city. An illustration of these areas and tabulation of the data developed are included in Appendix A.

Land Use Projections

Before a comprehensive plan can be developed, the additional land use requirements must be established. Two projections of future needs have been made: the first assumes that present per capita trends will continue; the second utilizes established planning standards to recommend a 1985 land use distribution. Both projections are shown in table 12. There are several implications in the recommended land use distribution:

1. It is recommended that larger residential lots be encouraged in the outlying areas, so that the average per unit size will increase from about 5,000 square feet to about 6,500 square feet.
2. Present commercial areas must be revitalized and preserved in order to restrict the trend of commercial land expansion.
3. Additional land which may be required for heavy industries should be provided outside the present city limits of Helena.

Table 12

Helena Land Use Projections: 1965-1985

<u>Land Use</u>	<u>Area in 000's Sq.Ft.</u>	<u>Percent Developed</u>	<u>Sq.Ft./ Person</u>
<u>Existing in 1965</u>			
Residential	39,857	32.2%	1,829
Commercial	8,135	6.6	373
Manufacturing & Transportation	1,625	1.3	75
Public & Quasi-Public	8,150	6.6	374
Streets & Highways	45,400	36.7	2,082
Railroad Right-of-way	14,300	11.6	656
Open Space	<u>6,118</u>	<u>5.0</u>	<u>281</u>
Total Developed	123,585	100.0%	5,670
Agricultural Land	2,847		130
Vacant Urban Land	<u>123,760</u>		<u>5,677</u>
Total Undeveloped	126,607		5,807
Total Land Area	250,192		11,477
<u>Current Trend Projection, 1985</u>			
Residential	55,500	33.9%	1,880
Commercial	10,900	6.7	370
Manufacturing & Transportation	2,300	1.4	80
Public & Quasi-Public	11,100	6.8	380
Streets & Highways	61,400	37.5	2,080
Railroad Right-of-way	14,000	8.6	470
Open Space	<u>8,300</u>	<u>5.1</u>	<u>280</u>
Total Developed	163,500	100.0%	5,540
Agricultural Land	-		-
Vacant Urban Land	<u>86,692</u>		<u>5,937</u>
Total Undeveloped	86,692		5,937
Total Land Area	250,192		11,477
<u>Recommended Distribution, 1985</u>			
Residential	58,400	35.0%	1,980
Commercial	9,100	5.5	310
Manufacturing & Transportation	2,300	1.4	80
Public & Quasi-Public	13,300	8.0	450
Streets & Highways	55,000	33.0	1,860
Railroad Right-of-way	11,600	6.9	390
Open Space	<u>17,000*</u>	<u>10.2</u>	<u>580</u>
Total Developed	166,700	100.0%	5,650
Agricultural Land	-		-
Vacant Urban Land	<u>83,492</u>		<u>5,827</u>
Total Undeveloped	83,492		5,827
Total Land Area	250,192		11,477

(*) Excluding regional park requirement
@ 10 acres per 1,000 population.

LAND USE PLAN

RESIDENTIAL

-  single family estates
-  single family
-  medium density
-  high density

COMMERCIAL

-  commercial

INDUSTRIAL

-  light
-  heavy

PUBLIC & QUASI-PUBLIC

-  public lands & institutions

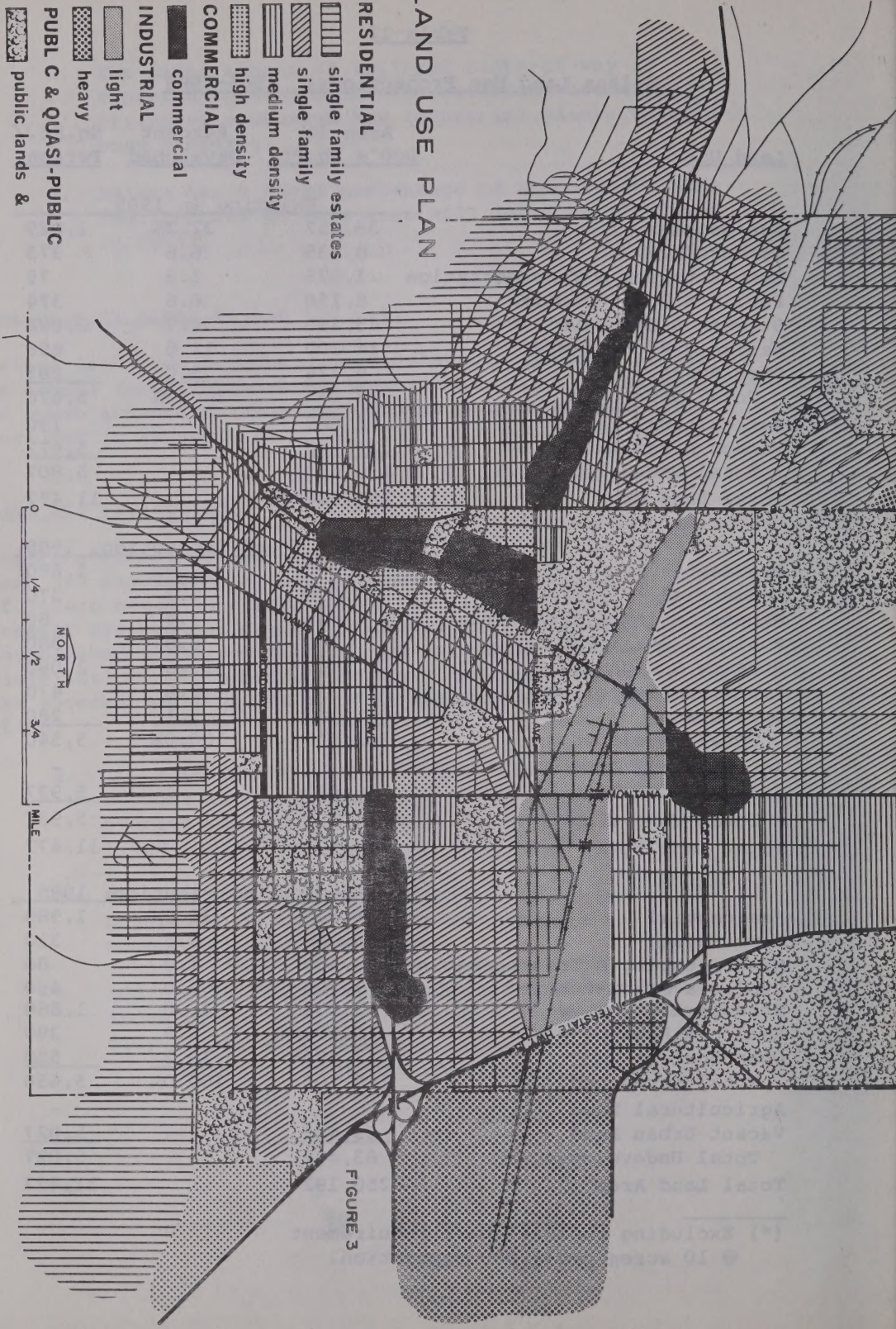


FIGURE 3

4. Present inadequacies in school site sizes and anticipated future requirements dictate that a larger percentage of public land will be required by 1985.
5. If only 20% of new development, rather than the current trend of 30%, were dedicated to streets, highways, and alleys, there would be a considerable saving in maintenance costs and a greater addition to the tax base.

The Land Use Plan

Each type of land use proposed in the land use plan, and illustrated in figure 3, is described in general terms below.

Single Family Residential Areas

Two different single family land use areas are delineated. The first type, proposed to be zoned as an R-1 District, is for very low densities on the hillsides along the southern edge of Helena. This district is intended to minimize the necessity for regrading the land by cuts and fills which create ugly gashes on the hillside and tend to increase erosion. Larger lots, curvilinear streets following the natural contours of the land, and building sites with a minimum of grading, can lead to a type of development that is not only more desirable for the residents and developers, but also more attractive as viewed from the city below.

The second type of single family development corresponds to the present single family zoning, except that land use restrictions are more severe and standards higher. For instance, gasoline service stations should be prohibited and the area should be protected from the intrusion of conflicting uses.

Medium Density Residential Areas

Either by original construction, or by conversion of single family homes to apartments, areas which are mixtures of one to six family houses are becoming more and more widespread

in Helena. The land use plan and zoning map will continue to allow for conversions or "natural changes" within certain areas, but will protect such areas from other kinds of development that cause traffic congestion, noise, and visual nuisances.

The areas selected for such uses are primarily those where this kind of development has already occurred. Room for expansion of these existing medium density residential developments into adjacent residential areas is also provided.

High Density Residential and Office Uses

As the capitol of Montana, Helena must provide for the temporary influx of capitol-oriented residents and activities. A high density residential and office district is proposed to satisfy these needs. High density residences are combined with professional offices, so that they may share parking, commercial, and other services, because they are not -- within the context of the restrictions imposed -- incompatible with one another.

The areas considered suitable for this kind of development are on both sides of the central business district, to the north of the capitol, and between the new St. Peter's Hospital site and Interstate 15, where nurses' residences and other medical offices may be expected to locate.

Commercial Uses

Three types of commercial areas are provided in the plan: (1) neighborhood, (2) highway-oriented, and (3) the central business district. Small neighborhood shopping areas, such as the small shopping area planned for the northeast corner of the Sunhaven development, must be provided to serve the day-to-day needs of residents distant from other shopping areas. It would be desirable to concentrate neighborhood shopping for northeast Helena around the intersection of Cedar Street and Montana Avenue.

Highway-oriented business locations are provided along Euclid Avenue on the west side and between Prospect and 11th Avenues on the east side. Highway-oriented businesses will offer much safer and more convenient shopping for Helena residents if they are kept within relatively compact areas, rather than being scattered along the highways throughout the city.

The central business district is a special problem, and its development should be planned through an intensive study of its market potential, access problems, parking needs, and design. It is proposed, however, that a large expansion area be provided between Getchell Street and Last Chance Gulch, and between Neill and Lyndale Avenues. It may be possible to fill this area, which is lower than the surrounding land, possibly with earth fill from the dredge tailings area located directly to the north. An alternative to filling would be to build a supported platform for commercial area expansion with the lower level remaining to be used for truck service access. Expansion of the central business district into this area would alleviate many problems, such as inadequate accessibility, open space and parking, caused by the poor location of much of the present business area.

The land use study indicates that Helena has much more business land than the amount typically found in other cities of similar size. It is unlikely that Helena could support much expansion to the north, and still maintain the present central business district as a viable commercial area. It is proposed that the declining southern end of the central business district be redeveloped as an historic area and governmental center. A new civic center complex located on a large, landscaped site would include a city and county administrative center, public safety building, courts, jail, and other similar public buildings. This area would be planned as part of a recommended Central Business District study and plan.

Industrial Land Uses

Two land use categories are discussed in this grouping. The first, light industrial (warehousing, light manufacturing, etc.), is oriented to the railroad and major highway pattern. Land provided for this use is located primarily where it now exists. The second, heavy industrial, requires relatively little land in the city because a new industrial complex is proposed east of the present city limits, where the more objectionable aspects of industrial development will least disturb the city. The land uses and transportation facilities now in this area are appropriate for heavy industrial uses. Prevailing winds will carry incidental smoke and other pollutants away from town, and the freeway will help to insulate it from incompatible types of development.

Proper standards are needed in industrial districts as well as in other areas of the city. The same logic that prohibits industrial development in residential neighborhoods should operate to prohibit residences in light and heavy industrial areas. Residential development often inhibits desirable commercial and industrial development, because the division of land into relatively small parcels makes it too expensive to reassemble the land for non-residential uses.

Public and Quasi-Public Land Uses

Many public and quasi-public activities are primarily oriented to serve the public where they live. The parks and playgrounds in the residential areas need to be located and designed in detail in subsequent phases of the planning program.

Other types of public activity, such as the government center, are centrally located and serve the entire city. It is proposed that a new civic center be located at the lower end of the central business area in a landscaped super block where it can serve the public and complement the attractiveness of the area as a whole. In addition, as part of an adjacent renewal project, it is proposed that the historic area of the city be preserved, improved and protected as an attraction for both residents and tourists. Special provisions are made in urban renewal procedures for historic preservation.

A large area in the vicinity of the Capitol has been designated for public uses, i.e., the expansion of the Capitol campus. In this area, also, the heights of the buildings should be limited by agreement so that the view of the Capitol dome is not impaired. A plan for the future development of the Capitol area should be prepared in some detail, with joint city-state participation. In this plan, the gully running north and south, west of the Governor's Mansion, should be landscaped for park use.

The area between Carroll College and Bausch Park should be abandoned for its railroad and commercial uses, and its use should be restricted for the expansion of the college and possibly the park. For this reason, it has been designated as a public use area.

As this planning program was getting under way, attempts were being made to acquire a large portion of the tailings area north of the railroad and adjacent to the present municipal golf course for golf course expansion. This acquisition is a logical requirement for meeting the recreation needs of the people of Helena and has been so designated on the land use plan.

The land in the northeast corner of Helena, between the freeway and the airport, is in an airport approach zone in which both the heights of structures and the intensity of uses should be restricted. This area has been designated as an open space reserve until decisions can be made as to its eventual disposition. Successful damage suits against airports in Seattle and in Pittsburgh indicate that it may very well be less expensive to acquire such airport approach lands in advance of development. The FHA will not insure mortgages on homes in an airport approach zone. Eventual uses for park and recreation would be very desirable, and if properly developed would put Helena in an enviable position in relation to other Montana cities not only for recreation space for its people to enjoy, but also as a tourist attraction.

THE THOROUGHFARE PLAN

Introduction

The purpose of this section is to prepare a logical and desirable plan for traffic circulation in Helena. A functional pattern of thoroughfares, freeways, scenic routes, arterials, and collector streets is presented, and related to the future needs of population growth and land use development.

The proposed thoroughfare plan shown on figure 4 is a combination of existing and proposed arterial streets, designed to accommodate future local and through traffic flows in and around Helena. Many arterial and collector streets shown on the plan already exist. Moreover, the locations of the proposed parkway, east-west freeway, and some arterial streets are presented as suggested general needs for trafficways. These should not be considered as exact locations. Detailed engineering studies would be required before specific route locations could be determined. Some parts of the recommended road network, such as the proposed east-west freeway, will not be required to serve traffic until the Helena urban area reaches a population level higher than that expected by 1985. Other parts are needed very soon. However, if the ultimate roadway system is not set forth now, and if long-range programs are not organized to carry the road plan into reality, the ultimate cost of rebuilding and widening streets to accommodate increasing volumes of traffic will be much higher. It is recommended, therefore, that the basic road system set forth in the plan be adopted, and that adequate road rights-of-way be established to permit necessary land acquisition and the construction of roadways to meet future travel demands.

In planning the spacing and location of arterial and collector streets in Helena, consideration was given to: (1) topography, (2) desirability of retaining developable land, undivided by arterial roads, (3) provision of adequate traffic capacity to serve the forecast (1985) pattern of land use, and, to the extent possible, (4) avoidance of splitting residential neighborhoods with traffic arterials.

Thoroughfare Design Standards

The thoroughfare plan includes the following types of traffic ways:

Freeway: A high speed, high capacity roadway exclusively for motor vehicle traffic, with full access control and separation of crossing movements, to serve through traffic only.

Expressway. A divided arterial highway for through traffic with partial access control and possible grade separations at major intersections, to serve through traffic primarily but adjoining property also, where unavoidable.

Scenic Route: A parkway or scenic highway which provides a route for recreation travel through corridors of scenic interest, in addition to other traffic functions for which it is designed. It is not intended or designed for high speed or for high traffic volume.

Arterial: A street which collects and distributes traffic from freeways or expressways to lesser streets or to large commercial, civic or cultural centers, or industrial areas. Along with natural topographical barriers, arterial streets usually serve as effective neighborhood boundaries. An arterial usually serves both as a carrier of through traffic and as access to adjacent properties.

Collector: A street which serves an intermediate collection and distribution function between arterial streets and local access streets, and provides for both through traffic and adjacent property access.

Table 13 indicates thoroughfare design standards which are recommended for the Helena thoroughfare system.

THOROUGHFARE PLAN

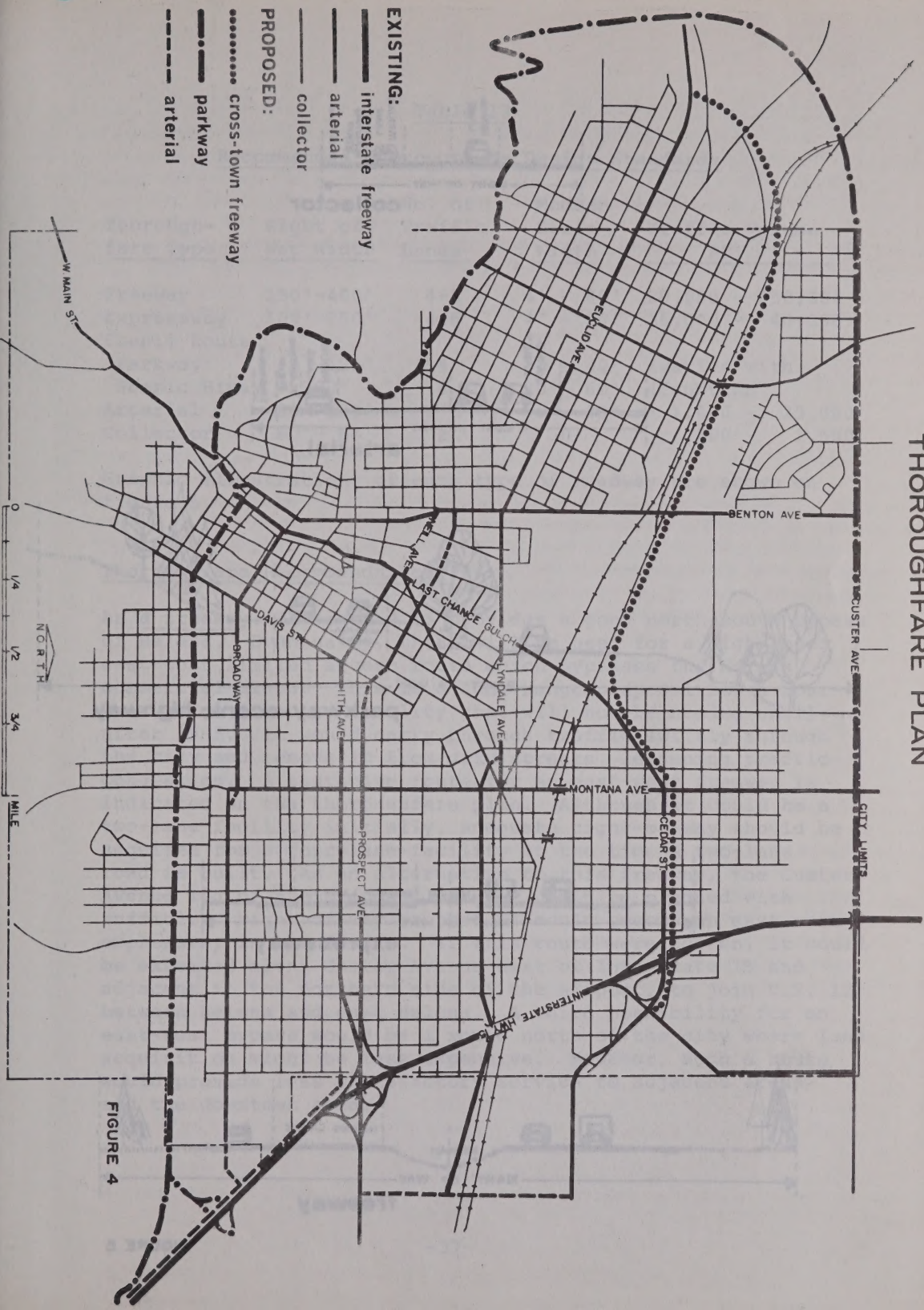
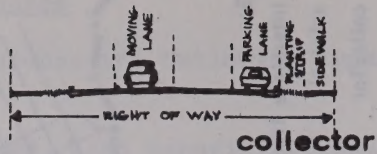
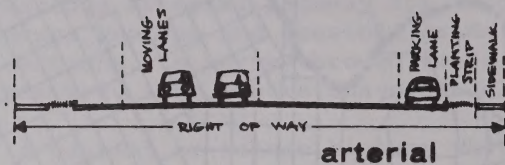


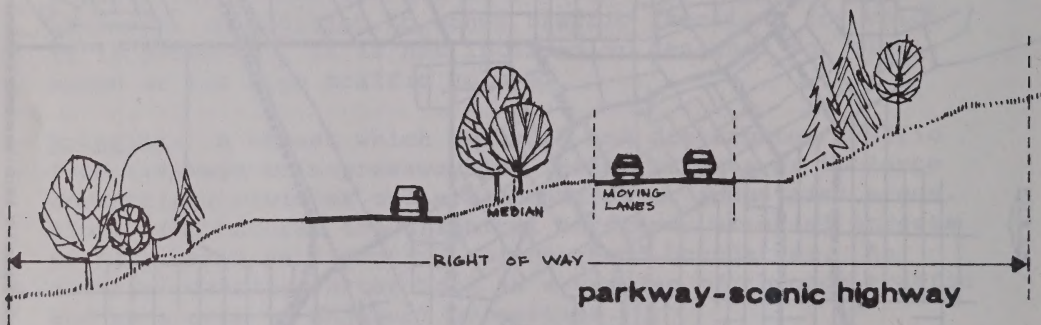
FIGURE 4



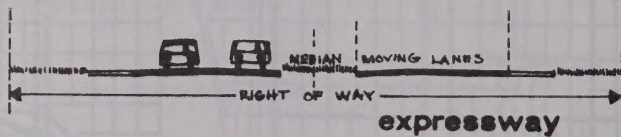
collector



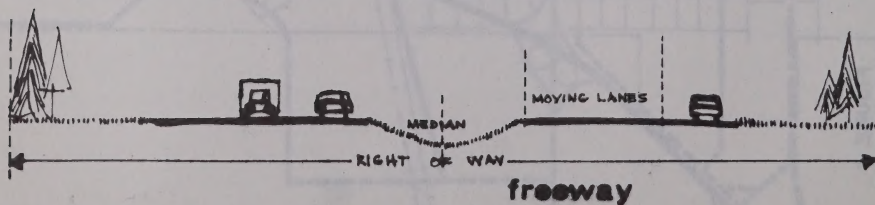
arterial



parkway-scenic highway



expressway



freeway

FIGURE 5

Table 13

Recommended Thoroughfare Design Standards

<u>Thoroughfare Type</u>	<u>Right of Way Width</u>	<u>No. of Traffic Lanes</u>	<u>Median Strip Width</u>	<u>Traffic Volume ADT</u>
Freeway	150'-400'	4-8	4' - 80'	20,000 - 150,000
Expressway	100'-150'	4-6	4' - 20'	15,000 - 40,000
Scenic Route				
Parkway	80'-120'	4	20' - 40'	(varies with
Scenic Hiway	200' +	4	20' - 60'	(function
Arterial	80'-120'	4-6	0' - 20'	1,000 - 25,000
Collector	60' - 64'	2	0'	300 - 1,500

Graphic illustrations of each type of roadway are shown on figure 5.

Thoroughfare Recommendations

As a freeway, Interstate 15 provides a good north-south bypass of Helena. Eventually, there will be need for a high speed east-west limited access route which bypasses the Helena commercial areas. This is a long-range proposal for a four-lane, high standard facility that will not be needed until after 1985. It would carry through traffic swiftly through the city and remove it from city streets, lessening traffic congestion. A tentative route for an east-west freeway is indicated on the thoroughfare plan. Although it could be a two-lane facility initially, adequate right-of-way should be acquired for a four-lane facility at the time a two-lane road is built. As an alternative to this freeway, the Custer Avenue leg of the proposed parkway could be planned with sufficient right-of-way so that it could become an east-west expressway in the future. If this route were chosen, it could be extended along Custer Avenue east of Interstate 15 and adjacent to the northern side of the airport, to join U.S. 12 between Helena and east Helena. A third possibility for an east-west bypass would be a route north of the city where land acquisition might be less expensive. However, such a route would provide less satisfactory service to adjacent areas and the downtown area.

A parkway is proposed to serve as a ring road providing circumferential access and enclosing most of the Helena urban area. The northern section of the roadway would begin at Williams Street and U.S. 12 on the west, follow the creek bed to the southern edge of the country club property, continue to join Custer Avenue west of the Highway Department shops, and then follow Custer Avenue, the northern city limit, to the Interstate Freeway on the east.

Access from the east and west sides of Helena to the south end of the central business district is very poor. Lack of adequate access is one reason for the northward movement of the CBD and the decline of South Main Street. The southern portion of the proposed parkway would follow this needed access. The proposed parkway would follow the Le Grand Cannon Boulevard right-of-way from U.S. 12 at Perry Lane to Holter Street. From Holter it would curve up the slope of Mt. Helena to the west of Woolston Reservoir and join South Main Street at Taylor Street, providing access to the CBD from the west. The southern parkway would continue east from Last Chance Gulch out State and Winne Streets to the proposed frontage arterial on the west side of Interstate 15, with a connection, also, to the freeway, completing the loop around the city.

The western loop of the ring road, from Custer Avenue on the north to Last Chance Gulch on the south, should be designated a scenic highway and constructed by the state. This would require a right-of-way of at least 200 feet, with not more than four access points per mile. Its design should emphasize its slower pleasure driving function, rather than its traffic carrying function.

Where further study would indicate such need, some future westside parks and playgrounds could be located adjacent to the parkway strip. The portion of the road south of U.S. 12 affords beautiful views across the Helena Valley for much of its length, and its eastern terminus would be in the historic area of Last Chance Gulch, south of the proposed civic center.

The crossing of Last Chance Gulch by a high level bridge was considered as a possible parkway feature, but was rejected as being too costly at this time. However, when more detailed locational studies are made, both the advantages and disadvantages of this feature can be evaluated.

The arterials shown on the thoroughfare plan are generally the same as those indicated on the previous Master Plan. The arterial across the Tailings area, from Fairgrounds Road to Last Chance Gulch, shown on the previous Master Plan, has been deleted as unnecessary. Lyndale Avenue is retained as an arterial from Benton Avenue to National Avenue, but swings one block south to Boulder Avenue from National Avenue to the existing freeway underpass and beyond to Seventeenth Street. Seventeenth Street is proposed as an arterial from U.S. 12 on the south to Phoenix Avenue on the north. This arterial would provide a connection from the airport to U.S. 12 and could also provide access to future industry in this area.

Eleventh Avenue is designated an arterial east of Fee Street to Interstate 15, where it turns to the southeast as a frontage road, providing connection to Broadway and the proposed parkway on Winne Avenue.

Only three collector streets are shown: The Fairgrounds Road-Henderson Street collector in western Helena; Helena Avenue from Last Chance Gulch to Boulder Avenue in central Helena; and Lamborn Street from Boulder Avenue to Winne Avenue in eastern Helena. These streets connect arterials and serve to funnel traffic from local service streets to the arterials.

Downtown Parking

In order to see what changes have taken place in the provision of off-street parking for Helena's central area during the period since the 1960 parking survey was accomplished, an inventory of off-street parking was made in 1965 and compared to the earlier survey. The results of this study are included as Appendix C to this report.

PUBLIC FACILITIES

Introduction

The public facilities section of the comprehensive plan is an inventory and analysis of existing municipal police, fire, school, and library facilities, and park and recreation areas. Established guidelines have been utilized as necessary to provide appropriate estimates of public facility requirements. Data developed by the economic and population study have been instrumental in determining the level and distribution of services. All of this basic analysis is then translated into elements of plans for public facilities.

Municipal Facilities

Helena's present civic center contains the City Hall, offices of the Mayor and City Manager, the Treasurer, City Engineer, the Police Judge and court room, the police department and the jail, the fire department and an all-purpose civic auditorium. Built originally as a Shrine Temple, its near eastern style of architecture and room dimensions are not appropriate to its function, and the design does not relate to Helena or Montana. Since the building was not designed for its present use, there are serious problems in utilization of space. Currently, there is no expansion room left for city offices in the building, and thought has been given to moving the police and court operations to another building, if a suitable one can be obtained. It is becoming more and more evident that a new civic center, designed for efficient municipal operations and public convenience, and as a source of pride to the community, will be needed for Helena.

Police Facilities

The police department is currently using portions of three levels of the civic center building: the main floor, the basement, and a room in one of the minarets. The jail is completely inadequate to meet federal standards. Prisoners are crowded together, and there is only one small cell for women prisoners. Outside of the physical plant itself, the police facilities and equipment are second to none in Montana.

The present police station should be relocated to another site in a new civic center as early as possible.

Consideration is being given to the renovation of another building to adapt it to police and jail activity needs. This may be very expensive, not only in terms of direct renovation costs, but also in terms of increased operating costs and continued inefficiencies over the years. It is therefore recommended that consideration also be given to the alternative of building a new public safety building, especially designed for such functions.

The Federal Bureau of Prisons maintains a cost-free consulting service available to any community, on the design of local jail facilities, and provides standards for their construction. The City of Helena would do well to take advantage of such services. The new facility should be built to federal standards, and should include: (a) individual cells for adults, (b) a "bull pen," or large enclosure, for minimum maintenance prisoners, (c) quarters for females, (d) a small facility for mentally disturbed persons, and (e) a facility for the detention of minors. By law, the juvenile detention facility must be separate from the jail. The police department, Police Judge, and municipal court should also be relocated from the civic center to the proposed public safety building; other safety functions such as health inspection or building inspection may also be rehoused there.

Fire Department Facilities

The only fire station in Helena is located in the civic center. From this location, northwest of the central business district, it affords good service to the downtown area, and western and northwestern Helena. However, runs to the east side of the city are long. In order to provide a facility in the area with the poorest service at present and to areas of anticipated urban growth, the city has purchased two lots at the southeast corner of Roberts Street and Ninth Avenue as the site for a new fire station.

There is a need for a training tower facility, which could be located in the vicinity of the present station or at the site of the proposed new station.

In the estimation of the Fire Chief, there are not enough hydrants for good fire protection in the areas directly west of the present station and along the eastern edge of the city.

Efforts to improve hydrant distribution will have to be intensified for the public safety. The new storage tank and linkage of the water distribution system, proposed in the public utilities section of this report, will assist in alleviating the problem by providing better water pressure and allowing the extension of lines to areas where extensions have been restricted in the past.

The overall capability of the fire protection function in Helena is periodically evaluated for the Board of Fire Underwriters as a basis for setting fire insurance rates for the city. The ratings consider water supply, distribution of hydrants, adequacy of the fire department, the fire alarm system, cooperation of the police, building and fire prevention codes and their enforcement, and structural conditions in the community. From time to time, it is advisable for the Fire Chief to examine the penalty scores indicated in the city's fire protection rating, and to discuss with the City Council the costs and benefits involved in an improvement of the city's rating. Usually the higher the expenditures for good local protection and control activities the lower the insurance costs for all property owners. The city must balance the costs and benefits between these alternatives.

Library

The Year 1968 will mark the centennial of the first opening of the Helena Public Library, begun on a sustaining fee basis. In 1886, the library became the Helena Free Public Library, the oldest in Montana--and perhaps in the entire Northwest.

The library has been located in a former church building at Park and Lawrence Streets, one block south of the civic center. The building is in good repair, but it is old and was not designed to function efficiently as a library. Recent increases in shelf space are already filled with books.

A bookmobile has been newly acquired, to extend library service to three surrounding counties.

The library is supported by the property tax levy and is limited to 3.5 mills. Usually the library has to cut back on its programs at the end of each year as the budgeted funds become inadequate.

There is not much public pressure right now to build a new library building, but as Helena's population grows and the building becomes even more crowded, the need for a new building will increase. A citizens' group should be formed to study library needs, and initiate a bond issue proposal for a new building when it is needed.

SCHOOLS

The importance of education and its effect on the human resources of our communities cannot be overstressed. Not only must schools train youth to cope with the rapid changes in society and their environment, but the extent, quality and length of education must be enlarged. Schools must be better designed to provide an environment that is inspirational to the learning process.

In discussing needs for physical facilities for schools, it is not intended to underestimate or deprecate the importance of the school program content or the quality of teaching and teachers. Although this study focuses on school facility needs, the quality of education is still considered to be of the greatest importance.

This study attempts to determine the number of schools and the school site sizes that will be needed in Helena by 1985. These requirements would help the location and acquisition of school sites, in advance of need, and thus reduce the high land costs that often cause either poorly located schools or inadequate school sites. To determine school needs, enrollment trends by grade and school type and future population age groups in Helena were examined. These are detailed in Appendix D for both public and parochial schools.

Classroom Needs

The Montana state standard for the number of pupils per elementary classroom varies between 26 and 30 for different grade levels. Applying a standard of 25 pupils per room to the projected enrollment yields the estimated number of classrooms (indicated in table 14) needed to accommodate the existing and forecast enrollment described in Appendix D.

Table 14

Estimated Number of Classrooms Needed

	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>
Elementary					
(1-6)	105	129	143	168	192
Junior High					
(7-9)	56	58	71	83	96
Senior High					
(10-12)	<u>54</u>	<u>56</u>	<u>64</u>	<u>73</u>	<u>84</u>
Total Public	215	243	278	324	372

At the present time, there are 101 elementary classrooms in use, including several substandard rooms. The construction of the new 12-room school at Ehler's Corners and the 10-room school at Helena's city limits will bring the elementary classrooms in Helena up to the state standard for the present. There are now 56 junior high classrooms. The new 16-room ninth grade addition to the C. R. Anderson School on the west side of town will relieve the overcrowding at the junior high and bring junior high classrooms up to the standard. However, projected school classroom needs will require the construction of additional classrooms in the future.

Table 15

Additional Classrooms Needed

	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>
Elementary	-	14	28	53	77
Junior High	-	-	10	22	35

On the basis of a desirable limit of 13 rooms in an elementary school, there will be a need for an additional six elementary schools by 1985. Some of the elementary school needs could be met by expanding existing schools which are too small for efficient management and are located in areas of future growth. The new school at the east city limits should be expanded, and rooms could possibly be added to the Broadwater, Lincoln, New Jefferson and Ray Bjork schools. Nearly all of these schools have a smaller capacity than is considered efficient for administrative purposes, and are in areas of expected residential growth. A new junior high school will be needed before 1975. This could be a new school located north of Sunhaven or an expansion of the Ehler's Corners elementary school to include junior high grades. Both of these sites are north of the present city limits.

School Sites

The following standards for school sites should be followed for all new construction in the Helena District.

Table 16

School Site Standards*

	<u>Number of Pupils</u>			<u>School Site Size</u> <u>Acres</u>		<u>Radius</u> <u>Served</u> <u>Miles</u>	<u>Minimum</u> <u>Site</u> <u>Acres</u>
	<u>Minimum</u>	<u>Ideal</u>	<u>Maximum</u>				
Elementary	230	700	900	5+1/100 Potential Enrollment#		0.5	5
Junior High	750	1,000	1,500	15+1/100 Potential Enrollment		1.0	10
Senior High	900	1,500	2,500	25+1/100 Potential Enrollment		2.0	20
Elementary-Junior High Combination				15+1/100 Potential Enrollment			
Elementary-Park Combination				8+1/100 Potential Enrollment			
Junior High-Park Combination				40+1/100 Potential Enrollment			
Senior High-Park Combination				35+1/100 Potential Enrollment			

(*) Urban Land, May 1961.

(#) For example, an elementary school designed for a capacity of 700 pupils should have a site of 12 acres.

Except for the two new school sites, all of Helena's school sites are below these standards, and most are less than half the standard size. Based on the standards, six new elementary schools would require 44 acres of land by 1985. A new junior high school would require 24 acres. There is enough land to satisfy this standard at the existing Ehler's Corners site. With the construction of the ninth grade wing at the C. R. Anderson school, the site should be enlarged as much as possible, while adjacent land is still available.

The high school wing constructed in 1962 and the new vocational-technical school will accommodate public high school enrollment for the next few years. However, additional classrooms will be needed by 1975 and, at that time, a decision will have to be made to either enlarge the present high school or build a second high school. Following the recommended high school standards, either course of action is possible, but it is suggested that the needs of Helena School District citizens would best be served by the construction of a new high school to open before 1980. This school, on a site of at least 35 acres, should be built in stages, with additions constructed when needed.

The projections of school needs provide valuable guidelines for decision and action, serving to indicate the need for school site acquisition and school construction. The school administration should start soon to utilize this information by planning, financing, site acquisition and reservation. Good sites will not be available very long, and the alternatives they may soon face are sites of inadequate sizes or poor location.

PARKS AND PLAYGROUNDS

The increase of leisure time and its use is beginning to be considered a problem. Not only are working hours decreasing, but the increase of both vacation time and family income has intensified the demand for recreational facilities. Use of facilities has expanded to the extent that overuse of many large facilities has resulted in deterioration.

Play areas and parks satisfy more than recreational needs. They provide relief from the monotony of buildings and streets and a psychological lift to the surrounding areas. They serve to reduce blight in their environment because properties near them tend to be maintained or rebuilt rather than being allowed to deteriorate. They serve as a physical resource to be passed on to coming generations and as a heritage, a place for monuments to great men and community leaders.

All of these values are in addition to those of the recreation facility as a quiet place to sit under the trees, or as a place to exercise and let off steam.

Most importantly, Helena--in the heart of the Big Sky Country--should not allow the abundance of natural beauty and recreational opportunities at its doorstep to diminish the need for park and playgrounds within its urban area. The city should not stand as a cluster of buildings from which inhabitants can escape to the mountains and lakes on weekends. As Helena is an integral part of Montana, so should Montana be an integral part of Helena. Its mountains, its heritage, its truly big sky, and its feeling of spaciousness should permeate the lives of Helena residents at work and at home, as an inseparable part of their urban lives. Pollution of a landscape is more common than pollution of air or water, and one need not look as far as Los Angeles or Chicago to find it. It is a growing problem in Montana now. It is a growing problem in Helena.

Whether, in the future, Helena retains its spaciousness, or whether it is simply another place to spend the working hours, will depend largely on the city and county's decisions on acquisition of open spaces.

The present study is only an inventory of existing recreation acreage and does not attempt to be a detailed analysis of all recreation facilities or an open space plan. Reference is made to established guidelines in order to give some indication of the general requirements for the future. A more detailed and complete plan will be necessary in order to qualify for the various federal assistance programs which provide funds to help pay for acquisition, site planning and development of recreation areas.

Present Facilities

The City of Helena owns twenty park and playground sites in the city, totaling about 157.3 acres. These park lands are shown on figure 6 and listed in table 17. In addition to these city park sites, ten public school playgrounds, totaling 17.7 acres, function as neighborhood playgrounds in Helena. When these school areas are added to the park sites, a total of 175.0 acres is available for recreation within the city. The city also owns 160 acres of park land on Mount Helena. This land is presently leased to a private club for horseback riding.

The Park Department has a permanent staff of four. In the summer, an additional 20 maintenance people and 24 playground directors (young adults) are employed. Parks funding is limited to 6 mills of the property tax by law, and Helena is close to this limit at the present time.

Comparison of current parks data and that from the previously prepared Master Plan is difficult because of some rather startling differences in acreage figures for the same sites. For the most part, park acreage was overestimated in the earlier report. Some existing park lands were omitted and some private landscaped sites were included as parks in the previous Master Plan. The following table lists existing park lands and school playgrounds in Helena and gives the area of each site. The area measurements were taken from legal descriptions, site maps and plat maps in the City Engineer's office or, where such information was not available, were measured from aerial photographs.

PARKS & PLAYGROUNDS 1965

- Neighborhood Playground
- ▲ Neighborhood Park
- Community Playfield
- * Community Park
- ★ Special Facility

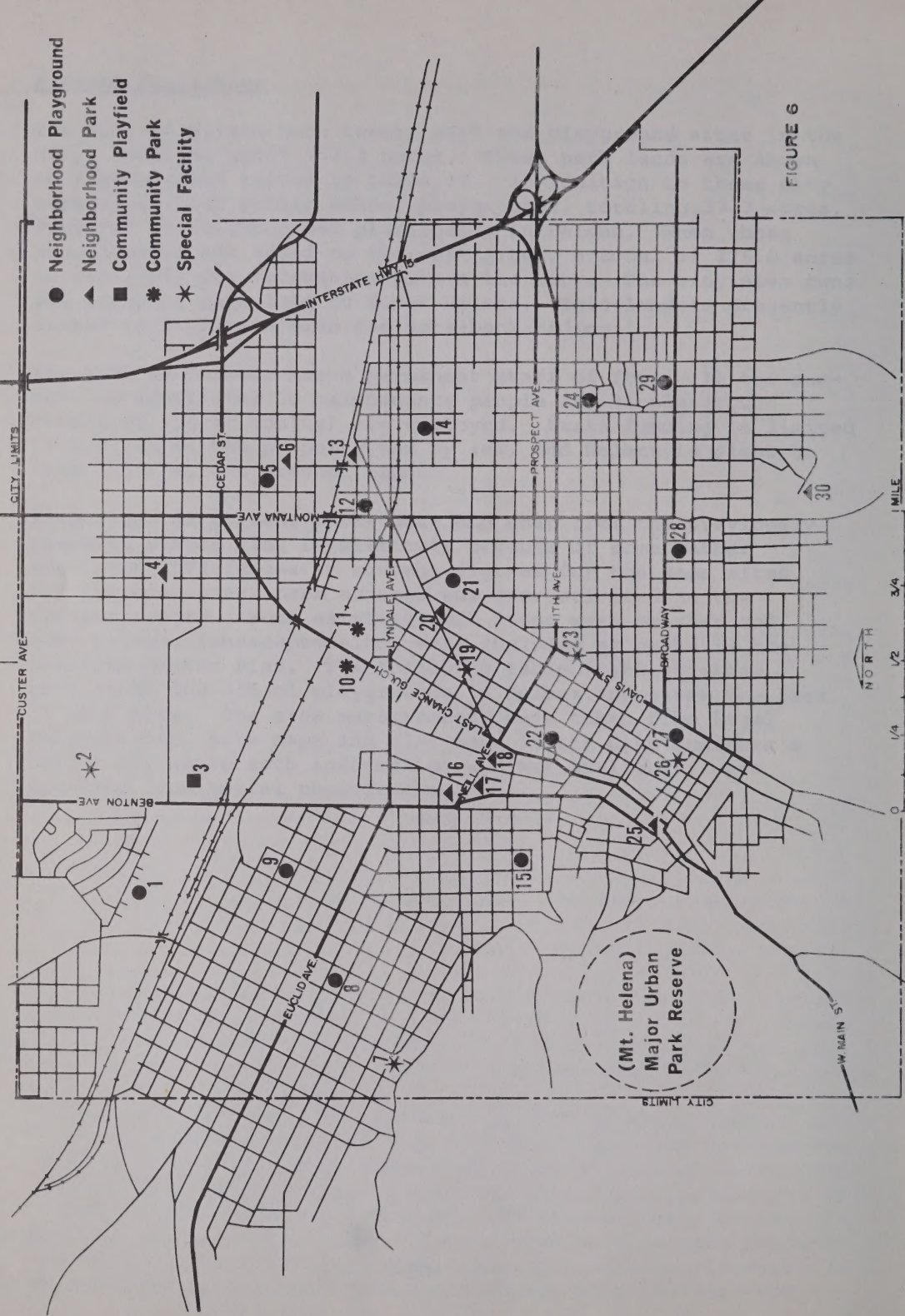


FIGURE 6

Table 17

Park Land Ownership and School Playgrounds in Helena, Montana

Map Key No.	Park or School Playground Site	Type of Park	Acres	
			1965	1960*
1	Sunhaven Park**	Neighborhood Playground	13.6	-
2	Golf Course	Special Facility	80.0	83.0
3	Kiwanis Park	Community Playfield	18.0	2.0
4	Cambridge Addition***	Neighborhood Park	1.9	Omitted
5	Lincoln School	Neighborhood Playground	1.6	2.0
6	Flower Garden Park	Neighborhood Park	4.2	1.5
7	Henderson & Flowerree Park	Special Facility	.1	Omitted
8	C. R. Anderson School	Neighborhood Playground	2.7	5.0
9	Broadwater School	Neighborhood Playground	2.1	2.3
10	Bausch Park	Community Park	2.1	Included in Mem.Prk
11	Memorial Park	Community Park	14.5	21.0
12	Northern Pacific Park	Neighborhood Playground	3.7	4.4
13	Beattie Memorial Park	Neighborhood Park	1.6	1.5
14	Bryant School	Neighborhood Playground	1.5	1.2
15	Hawthorne School	Neighborhood Playground	.6	1.5
16	Civic Center Ground	Neighborhood Park	2.9	3.7
17	Hill Park	Neighborhood Park	2.7	2.6
18	Ladies Park	Neighborhood Park	2.8	2.8
19	14th & Warren Park	Special Facility	.4	1.0
20	High School Park	Neighborhood Park	2.3	3.0
21	Junior High School	Neighborhood Playground	3.3	Omitted
22	Central School	Neighborhood Playground	1.5	Omitted
23	9th & Davis Park	Special Facility	.3	1.0
24	Ray Bjork School	Neighborhood Playground	2.0	4.6
25	Pioneer Park		.5	1.0
26	Ewing & Wood Park	Special Facility	.2	.6
27	May Butler School	Neighborhood Playground	.3	2.3
28	Jefferson School	Neighborhood Playground	2.1	3.0
29	Lockey Park	Neighborhood Playground	3.7	3.0
30	Diehl Park	Neighborhood Park	1.8	-
Total Neighborhood and Community Sites			175.0	
Mt. Helena Site Major Urban Park			160.0	Omitted
TOTAL			335.0	

(*) Acreage from previous Master Plan.

(**) Not yet officially deeded to city.

(***) Deeded to city in plat--use not specified.

Table 18

Municipal Park Standards, Helena, Montana

<u>Facility Type</u>	<u>Acreage Required</u>	<u>Site Size</u>	<u>Service Radius</u>
Neighborhood Park	1.25 acres per 1,000 population	less than 10 acres	1/2 to 1 mi.
Neighborhood Playground	1 acre per 100 potential elementary school enrollment	3-7 5 acres desirable minimum, exclusive of school sites	1/4 to 1/2 mi.
Community Park	1.25 acres per 1,000 population	25 or more acres 1 site per 20,000 population	1 to 2 mi.
Community Playground	1.25 acres per 1,000 population	12-25 acres 10-acre minimum 1 site per 20,000 population	1 to 2 mi.
Major Urban Park	2.50 acres per 1,000 population	100 acres or more 1 site per 40,000 population	2 to 3 mi.
Special Facilities	5 acres per 1,000 population	varies	Community
Regional Parks or Preserves	10 acres per 1,000 population	several hundred acres	Region-wide

Park guidelines have been developed for the City of Helena based on a comparative analysis of standards from a variety of sources and on what is deemed a feasible goal for Helena. They are more detailed than the guidelines previously used in Helena and include the following types of facilities:

Neighborhood Park: A natural landscaped area of limited size, designed primarily for passive recreation and local use.

Neighborhood Playground: An active play area designed for intensive use by children and family groups, and affording limited opportunities for informal recreation for people of all ages.

Community Park: A large park area containing natural features of communitywide interest, and which may contain a playfield and other specialized facilities.

Community Playfield: A larger active play area providing for a greater variety of recreational opportunities than a playground. It should, desirably, be located in conjunction with a junior high school or high school fieldhouse, or other community center facilities.

Major Urban Park: A large park area providing broad expanses of natural scenery and capable of accommodating large numbers of people. It often includes special facilities of areawide interest.

Special Facilities: Playlots, squares and plazas, public beaches, swimming pools, parkway systems, golf courses, green belts, miscellaneous areas and facilities of a special nature for which standards are difficult (if not impossible) to formulate, and whose number, location and distribution is dependent upon a number of factors, such as physical conditions, natural amenities, opportunity for acquisition and public need and demand.

Regional Parks and Preserves: Large areas (over 100 acres) that serve recreation needs for an entire region, parkway systems and other similar areas.

Proposed guidelines for such park and playground facilities for Helena are shown on table 18.

In order that the Helena Park System may be examined in terms of these guidelines, the existing parks and playgrounds have been tabulated, by type of facility, in table 19.

Table 19

Existing Parks and Playgrounds by Type
1965

	<u>Acres</u>
<u>Neighborhood Parks:</u>	
Sunhaven Park*	13.6
Cambridge Addition	1.9
Flower Garden Park	4.2
Beattie Memorial Park	1.6
Diehl Park	1.8
Civic Center Grounds	2.9
Hill Park	2.7
Ladies Park	2.8
Pioneer Park	.5
High School Park	2.3
Total	34.3
<u>Neighborhood Playground:</u>	
Northern Pacific Park	3.7
Lockey Park	3.7
City Total	7.4
Broadwater School	2.1
Lincoln School	1.6
Bryant School	1.5
Ray Bjork School	2.0
May Butler School	.3
Jefferson School	2.1
Hawthorne School	.6
C. R. Anderson School	2.7
Central School	1.5
Junior High School	3.3
School Total	17.7
Total	25.1

Table 19 (Continued)

		<u>Acres</u>
<u>Community Park:</u>	Bausch Park	2.1
	Memorial Park**	<u>14.5</u>
	Total	16.6
<u>Community Playfield:</u>	Kiwanis Park	18.0
<u>Special Facilities:</u>	Golf Course	80.0
	9th & Davis Park	.3
	Henderson & Floweree Park	.1
	Ewing & Wood Park	.2
	14th & Warren	<u>.4</u>
	Total	81.0
<u>Major Urban Park:</u>	Mt. Helena	160.0
<u>Regional Parks</u> <u>and Preserves:</u>		<u>0</u>
	Grand Total for Helena	
	Excluding School	317.3
	Grand Total for Helena	
	Including School	335.0

- (*) To be deeded to the city in plat; Sunhaven Park has been shown as a neighborhood park, although a portion of it will function as a neighborhood playground.
- (**) Memorial Park has been included as a community park, although it has many features of a community playfield.

By applying the recommended guidelines to the forecasts of elementary school enrollment and population in Helena, gross estimates of future park land needs were derived and are presented in table 20.

These estimates of citywide needs must be adjusted through further study to reflect intracity deficiencies caused by the uneven distribution of park lands relative to population. This is particularly true of neighborhood facilities.

It would appear from table 20 that only two and one-half acres of additional neighborhood park land would be needed by 1985. However, considerably more acreage than is shown in the table will be required by 1985, in order to correct existing neighborhood parks deficiencies within the city. Thirty-four acres of neighborhood playgrounds will be needed by 1985, over and above the present supply. The table indicates that an additional 20 acres in community parks and an additional 19 acres in community playfields will be needed by 1985. The 1985 major urban park need can be supplied by the existing 160 acres of park land on Mt. Helena. At the least, an additional 67 acres will be needed in special facilities by 1985. This could include an expansion of the existing municipal golf course.

The regional park need of 295 acres by 1985 is not Helena's concern alone. By definition, a regional park is region-wide in scope, and consequently is the responsibility of the state and county as well as the city. A county parks plan and program that will relate to a similar plan for the city should be prepared. A detailed parks and playground plan must be undertaken for Helena and the surrounding county area before Helena and the county lose opportunities to acquire sites that will be needed in the future.

Table 20

Estimated Citywide Acreage Needs
Based on Recommended Guidelines

	<u>Existing Facilities</u>	<u>Total Acres Needed</u>				
		<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>
Neighborhood Parks	34.3	27.3	28.6	31.1	34.0	36.9
Neighborhood Playgrounds	<u>25.1*</u>	<u>33.7</u>	<u>40.4</u>	<u>45.3</u>	<u>52.0</u>	<u>59.8</u>
Total Neighborhood	<u>59.4</u>	<u>61.0</u>	<u>69.0</u>	<u>76.4</u>	<u>86.0</u>	<u>96.7</u>
Community Parks	16.6	27.3	28.6	31.1	34.0	36.9
Community Playfield	<u>18.0</u>	<u>27.3</u>	<u>28.6</u>	<u>31.1</u>	<u>34.0</u>	<u>36.9</u>
Total Community	<u>34.6</u>	<u>54.6</u>	<u>57.2</u>	<u>62.2</u>	<u>68.0</u>	<u>73.8</u>
Major Urban Parks	160.0	54.5	57.3	62.2	68.0	73.8
Special Facilities	<u>81.0</u>	<u>109.0</u>	<u>114.5</u>	<u>124.5</u>	<u>136.0</u>	<u>147.5</u>
Total Municipal	<u>335.0</u>	<u>279.1</u>	<u>298.0</u>	<u>325.3</u>	<u>358.0</u>	<u>391.8</u>
Regional Parks or Preserves	<u>-0-</u>	<u>218.0</u>	<u>229.0</u>	<u>249.0</u>	<u>272.0</u>	<u>295.0</u>
GRAND TOTAL	335.0	497.1	527.0	574.3	630.0	686.8

(*) Includes school playgrounds.

School Playgrounds

Since all Helena schools, but one, are located on sites below recommended school site sizes, whatever playground areas are provided are very small. In many other cities or areas, the recommended neighborhood playground standard of one acre per potential 100 school enrollment is applied in addition to standards for school sites. All future school sites in the Helena School District which are to serve as neighborhood playgrounds should include playground acreage over and above the school site requirement. The school administration is to be commended for recent progress in this direction. The two newest elementary school sites in the district have adequate playground areas.

Expansion of some school sites toward at least equalling the school site requirement is recommended. For example, the C. R. Anderson school site should be enlarged to the west by acquisition of the block occupied in part by a trailer camp while the land is still essentially undeveloped. The block north of the trailer camp should also be acquired. Construction of the ninth grade wing will increase the demand for play area at the school and, although the present site is larger than many school sites in Helena, it is still inadequate for a combined elementary and junior high school.

A Parks and Playground Plan

Further planning is needed in order to detail existing park and playground deficiencies and future needs in the Helena Urban Area. The future county and city park and playground needs, by type of facility and area served, should be formulated by five-year periods to 1985. From this information a detailed parks and playgrounds plan for the future could be prepared. Such a plan would be the basis for continuing community discussion and should be included as a next phase of study.

In the past, the city has not purchased much of its park land. Although gifts and the deeding of parks in subdivision plats will still be future sources of park land, they must not be relied upon as the only sources. Helena needs to develop a strong action program for parks and

playground acquisition based on a sound plan. This plan would serve as a guide for municipal decisions on the acquisition and development of parks. With such a plan, specific priorities could be established through community discussions, and included in city and county capital improvements programs. A public information program should be initiated immediately to alert the community to the need for such a plan.

Water Supply System

Water supply is a major problem for the city. The city's water supply is primarily from three major systems: the Colorado River, the San Juan River, and the San Juan River. The Colorado River system is the largest and most reliable, but it is subject to drought. The San Juan River system is the most expensive, but it is the most reliable. The city is currently negotiating with the Colorado River Water Conservation District for a new water purchase agreement.

The city's water supply is currently in jeopardy. The city is currently negotiating with the Colorado River Water Conservation District for a new water purchase agreement. The city is also considering the possibility of building a new water treatment plant. The city is currently negotiating with the Colorado River Water Conservation District for a new water purchase agreement. The city is also considering the possibility of building a new water treatment plant.

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PUBLIC UTILITIES

Introduction

The public utility services inventoried in this study include the water supply and garbage and sewage disposal systems. Recommendations are made for the future expansion of these systems and, to some extent, for the extension or improvement of present service. A more detailed analysis of city-county sewage disposal requirements will be included in future planning studies.

Water Supply Systems

Helena's water supply comes primarily from three major systems. The largest, in use since 1960, is the Missouri River system, which at present can deliver 6.0 MGD (million gallons daily) of surface water from the equalizing reservoir northeast of Helena, through the filtration plant located a mile northeast of the airport, directly to city mains and the four million gallon steel East Side Storage Reservoir in south central Helena.

The next largest system, in use for over a century, is the Ten Mile gravity system, which can supply 4.0 MGD of water from the Ten Mile watershed, located in the southeast corner of Lewis and Clark County. Water sources for the Ten Mile system are natural drainage, ground water, a number of springs and underflow, and a shallow well. The water, after chlorination at Ten Mile Reservoir and settling basin, flows to Helena, into both the distributing system and the two Woolston storage reservoirs, each with 3.09 million gallons capacity.

The third system, the Hale, supplies .5 MGD from spring and ground water percolation in Oro Fino Gulch, south of the city, to the 2.29 million gallon Hale Reservoir, located one mile south of the central business district. Two small systems, with underground sources in a gulch in southwestern Helena, supplement the Hale and Ten Mile systems during periods of heavy use.

The reservoirs are patrolled three or four times a day. All are fenced, and all but the Hale Reservoir are covered. The State Department of Health wants the city to cover the Hale Reservoir in order to control the growth of algae and keep midge fly larvae out of the water supply.

The Montana State Department of Health has stated that if the Ten Mile Water supply is to be continued, arrangements should be made to clarify the water through some filtration system, perhaps a microstrainer or a diatomaceous earth filter, rather than the more expensive rapid sand filter system. Since Ten Mile is a gravity system, it surely will be continued, but, because it is not an expandable system, should be tied in to the Missouri system so that future expansion needs in western and northern Helena can be met.

After the big freeze in the winter of 1951, extensive repairs were required, and improvements were made to the distribution system. Many small mains were replaced by larger ones and more mains were added to the system. Interconnections between the Ten Mile and Missouri River systems should be made to increase flexibility of distribution system and to allow for residential expansion on the west side of Helena.

Water Consumption

The present consumption varies greatly between seasons, with summer consumption falling between 9-12 MGD and winter consumption in the range of 3-4 MGD. With storage taking care of short term peak summer consumption, there are about 1 MGD available at the present time for industrial use. The Missouri River system was designed so that capacity of the filtration plant could be doubled by installing additional pumps. This would bring the total water supply available to Helena to 16.5 MGD, adequate for a city of 30-40,000 population. The treated water line from the plant to the city has, however, a capacity of 8 MGD (only 2 MGD more than present plant capacity). An additional line will have to be added as the need approaches for more than 8 MGD from the Missouri system.

Helena has water rights on the Missouri for 5,680 acre-feet per year, or about 50 MGD. This is four times the present peak summer use in Helena, and enough for any foreseeable need.

Water Service Area

At the present time, water service can be guaranteed for only those parts of the city with elevations at least 75 feet below the storage reservoirs. The following table shows the elevations of the major storage reservoirs and the limit of service elevations 75 feet below the reservoirs.

The city of Helena should take steps, as soon as possible, to acquire a suitable site of sufficient size, and begin a sanitary land-fill operation to replace the present dump. For the past three years, the city has been earmarking money for acquisition of such a site. The City of Billings is using a nearby gulch as a land-fill site. A similar site may be available near Helena. As an alternate to a gulch site, the Tailings area in north central Helena could serve as a land-fill area while being prepared for future golf course and residential use. It would be desirable to get rid of the present refuse dump, and to include planning for re-use of the site as part of the future development plan for the airport and vicinity.

The State Department of Health has some power to speed the acquisition of a sanitary land-fill site. Under provisions of legislation, which became effective on July 1, 1965 (HB 122), the city refuse disposal site must be licensed by the state. The state will not continue indefinitely to grant Helena a license to dump refuse at its present site. After allowing a reasonable "lag time" for the city to get a sanitary land-fill program under way, the state can refuse to license the present dump. If the city has not acquired a land-fill site, the state may levy a \$50.00 per day fine against the city for dumping in an unauthorized area. The city has been reluctant to begin a sanitary land-fill program in the past because it believes disposal costs will increase. A caretaker will probably be needed, and the city will have to purchase a \$28,000 piece of equipment to handle the land-fill operation. However, the day is coming when the city will be forced to take such measures.

Sewage Disposal

The Helena sewage plant, located immediately north of the city limits, is only five years old. It was designed for primary treatment of six million gallons per day and is of sufficient size to handle the sewage of a city of 30,000 persons. The present recorded peak flows average around 3,500,000 per day, with a usual 1,500,000 gallons per day. It is known that some storm drainage is still tied into the sewer lines on the

HELENA SEWER SYSTEM

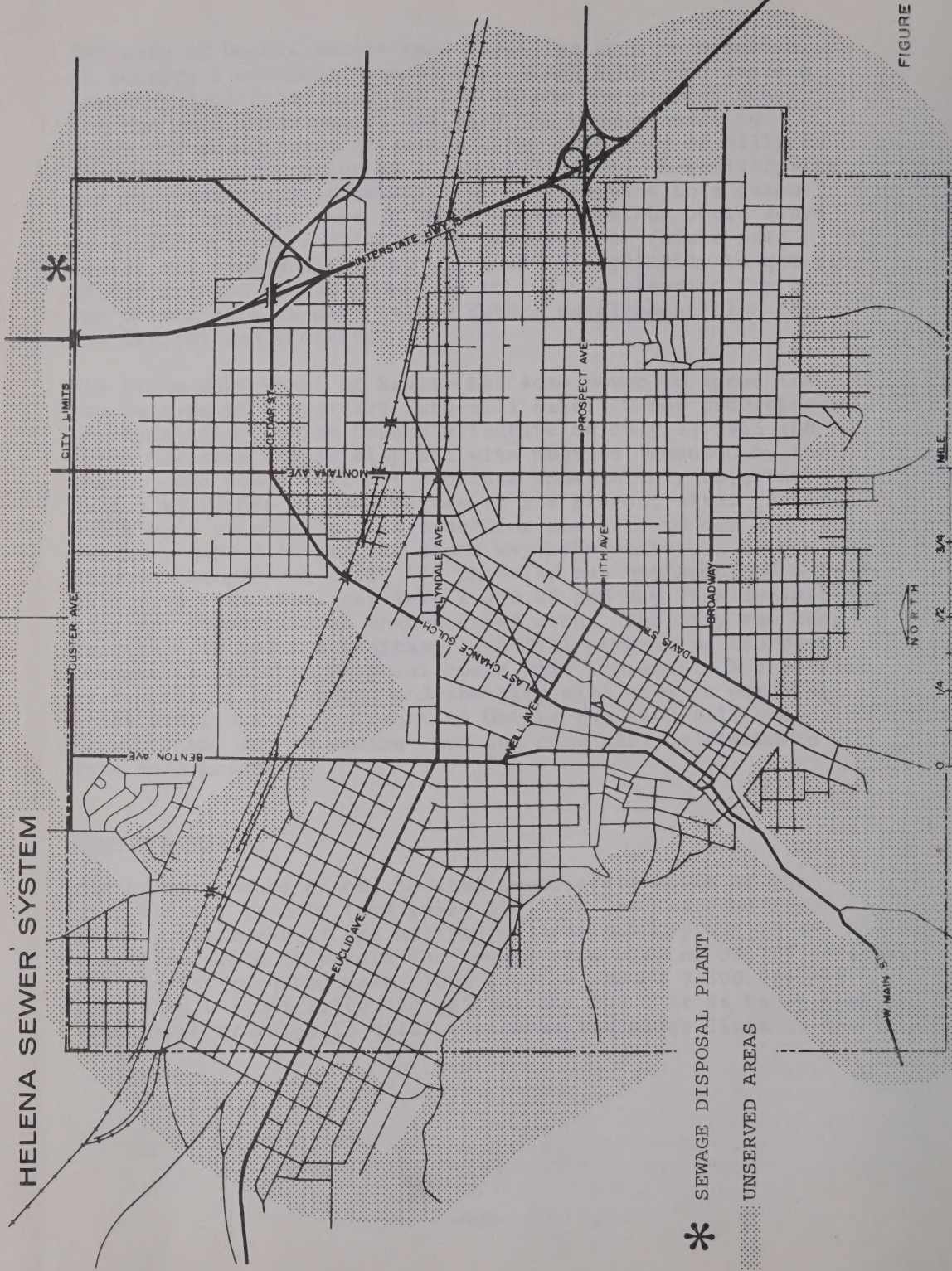
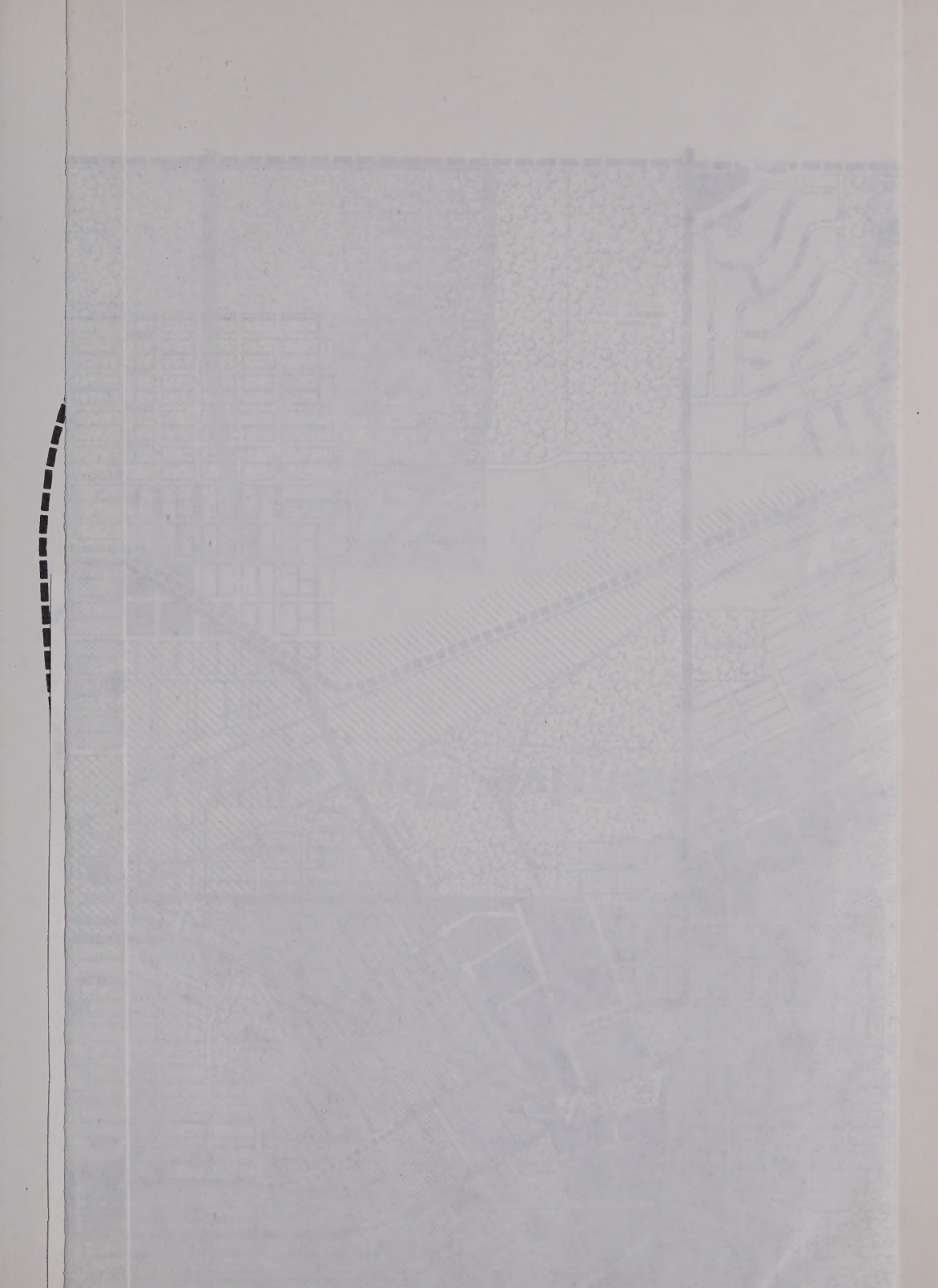
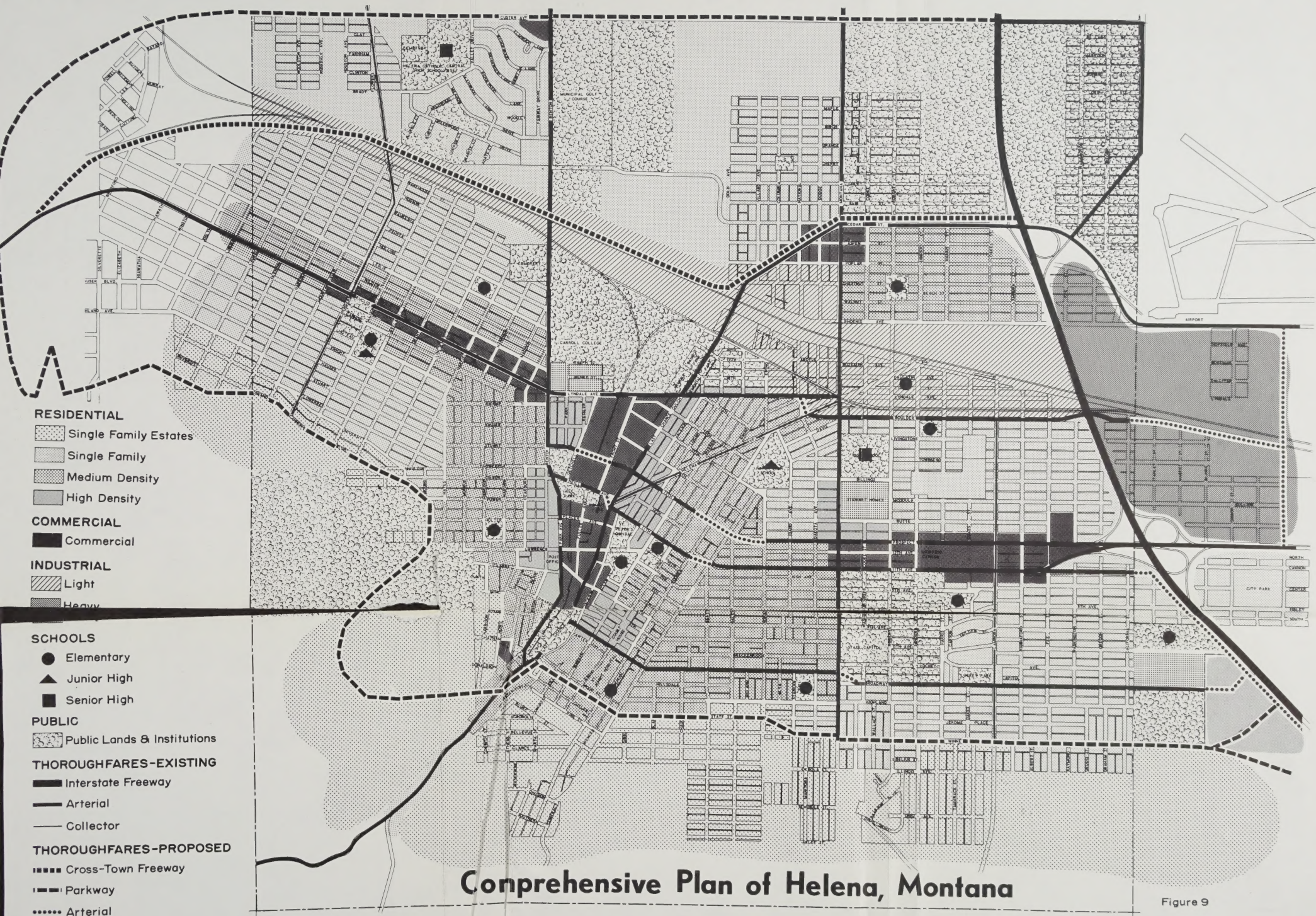


FIGURE 8

west side of town. This increases the flow after storms and when the snow melts, it cannot be removed from the system. During present peak flows, the plant is used to 72 percent of its capacity. The plant is in relatively good condition, although there have been serious breakdowns in the past. The sewage effluent is carried in a ditch from the plant to Prickly Pear Creek, which carries it to Lake Helena. The creek is nearly dry in the summer, and a number of residences dot the bank. When treatment is insufficient, complaints from these residents are quickly forthcoming. The U.S. Department of Health has been working with the city to improve treatment and testing. Secondary treatment and plant enlargement may be necessary by 1970. This would cost \$125,000 or more, but advances and innovations in equipment and new techniques may offer a more inexpensive method of secondary treatment of the effluent by 1970.

The areas of town which are not presently served by sewers are illustrated on figure 8. The unserved areas in southern Helena and southwestern Helena are at a higher elevation than the presently sewerred areas, so it would not be difficult to serve them. However, a new outflow on the east side of Helena will be needed to service expected residential growth south and east of the new St. Peter's Hospital site, between the freeway and the current city boundary. Extension of existing sewer lines would service the area north of Prospect Avenue and west of Interstate Highway 15. The unsewered portion of the Sunhaven addition could be served by extending existing lines. The same is true for the area north of the Northern Pacific tracks and across Montana Avenue and Cedar Street. It is logical to expect to extend service to the contiguous urban development on both sides of Euclid Avenue, adjacent to the western city limits, at some time in the future, as this is an area that may be annexed to Helena. The only remaining areas within the city that would be difficult to serve are the Rosedale addition, in the northwestern corner of Helena and the Tailings area in north central Helena. Mains of larger capacity will be needed in order to service the Rosedale addition. Pumps would also be required because of the small slope of the area. It can be expected that much of the Tailings area will go into residential use at some time in the future, for this is an undeveloped area that is close to both recreation facilities and shopping areas in the city.





THE COMPREHENSIVE PLAN AND ITS IMPLEMENTATION

Introduction

The comprehensive plan for Helena is shown on figure 9. It illustrates the interrelationships between the various aspects of the plan discussed above.

The comprehensive plan should not be considered as a final and rigid formula for Helena's future development, but as a guide for community improvement. Wherever the objectives of the community change, or changes in the projections of future population and economic activity are made or where any proposed major development implies a radical change in the community's structure, the comprehensive plan should be changed accordingly. The plan should be subject to periodic review to see to it that it meets the requirements of the community. On the other hand, it should not be changed at the whim of a group or an individual, but only for good reason. It should also be refined as additional detailed studies, concerned with the individual elements of the plan, are completed and adopted, such as the proposed central business district study, the sanitary sewer system study, or a parks and playgrounds plan.

The comprehensive plan will be extended to cover the portion of Lewis and Clark County within the jurisdictional area of the City-County Planning Board as the next step in the planning program for Helena and its surrounding area.

Plan Implementation

The plan is not considered to be only a report or a map, but a guide to action. Throughout the planning process, each of the elements of the plan has been considered in its relation to needs for an action program for general improvements of the community. If the plan does not serve as a guide for action or community improvement, then it has served only an educational purpose. To help make this plan useful as a guide towards a coordinated improvement program for the city, proposals have been made for the implementation of the plan.

Implementation of the Land Use Plan

The major element of activity involved in the implementation of the land use plan is the legal tool which is known as the zoning ordinance, and its administration and enforcement. To the extent that the zoning ordinance and map are based upon the recommendations of the land use plan, and are properly administered and enforced, this serves as a major step in land use control to achieve the objectives of the plan. Over many years a good proportion of the buildings in the community are torn down and are rebuilt through private efforts. It is intended that, as these changes take place, the zoning ordinance will more and more become the determinant of the future use of the land. The front yard requirements will become an aid in the widening of future streets by the requirements of setbacks. The off-street parking requirements of the zoning ordinance will reduce the congestion on the streets and enable them to be used more and more for carrying traffic, which is their primary purpose. Conflict of land uses will be reduced and compatible developments will be encouraged.

The enforcement and administration of the zoning ordinance is most important. The rules of procedure must be fair to all. The zoning board of adjustment, which has been established as part of the proposed zoning ordinance, must keep necessary records and must indicate sound reasons for their decisions. The Building Inspector should establish a series of forms, as we have suggested, which can be used by the developer in applying for permits, for variances, or for conditional uses. The zoning map should be properly maintained and kept up to date so as not to mislead or confuse either the administrator or the public. No changes should be made in the zoning ordinance to suit any private interest which may be in conflict with the interests of the community as a whole as indicated on the land use plan.

Another element of land use control is the regulation of the subdivision of land, to see to it that past mistakes with respect to lots or streets are not repeated in newly developing areas. Standards for the subdivision of land should be applied to both residential and non-residential platting. Planned unit

developments should be encouraged if they do not violate the requirements or intent of the planning regulations.

Another tool for implementation of the land use and other plans is urban renewal. Urban renewal involves the use of legal tools of property acquisition or enforcement of codes in order to create desirable changes where the quality of development is obsolete or declining. It involves conservation of what is good, rehabilitation of what is getting bad and redevelopment of the obsolete portions of a community. Together with the enforcement of existing codes and ordinances, renewal may involve wholesale acquisition and clearance of portions of the community for its rebuilding in accordance with the plan. However, major surgery is not always required. Sometimes a combination of private efforts at rehabilitation, together with public improvements, can serve to provide the basis for renewal. A large proportion of the cost of renewal projects can be paid for either through local public improvements that are needed anyway, or through federal government subsidies in the form of loans or grants. It is often considered a last resort, but still a very important tool for plan implementation. Where urban renewal tools are used, the comprehensive plan and not the zoning map should determine future land use and design of development.

Implementation of the Thoroughfare Plan

Priorities for the implementation of the thoroughfare plan should be worked out with engineering staffs of the city, county and the State Highway Department. The most immediate needs appear to be the cross connections to complete east-west routes that serve to tie the western part of the city to the capitol area, particularly tying 11th into Neill and Benton and 13th into Stewart and Benton, and the widening of Benton north to Euclid with improved traffic channelization for such connections. In addition, a priority of rights-of-way acquisition for the thoroughfare system should be established and acquisition started. The financing for thoroughfare improvement should be worked out in greater detail in a

capital improvements program in the later stages of the planning program. The capital improvements program will be discussed further in connection with public facilities plan implementation.

Consideration should also be given to adoption of a mapped streets or official map ordinance. Such an ordinance prevents the construction of buildings within the right-of-way of proposed thoroughfares or on proposed park or public building sites, by alerting the municipality that the land must be acquired when such construction is proposed and by warning the builder that the building will not be paid for when the right-of-way is acquired. Since there appears to be no enabling legislation for a mapped streets or official map ordinance in Montana, this need should be brought to the attention of the Montana Association of City-County Planning Boards for legislative action. The new planning enabling laws of Minnesota can serve as a guide for such legislation.

The regulation of the sub-division of land can also be a very important tool for assuring that the thoroughfare plan is implemented in newly developing areas. Wherever new subdivisions are proposed in accordance with Section 11-3844RCM, the Planning Board determines whether a plat provides for "coordination of subdivision streets with existing and planned streets or highways," as well as "a fair allocation of areas or streets, parks and utilities." This may mean requiring the dedication to the public, and construction, of any street in the plat which conforms to the thoroughfare plan. It also may mean seeing to it that the streets within an area both fit the thoroughfare plan and meet the thoroughfare plan standards. Some communities have had many miles of thoroughfare plan provided through dedication in this way.

A good deal could be done towards eliminating the through traffic on residential streets where it does not belong by selectively closing off streets, as the thoroughfares are improved, in specific locations where too much traffic may be a hazard. One example of this is the proposed plan for the C.R. Anderson School expansion. The vacation of Allison Avenue and Cannon Street will add the street land to the school and playground sites. Other similar examples of street closings

or re-routings of traffic would be provided in the detailing of the parks and playgrounds plan. The City Engineer should review the plan with the Department of Highways and their plans for improvements of highways in the city of Helena.

Public Facility Plan Proposals

Guidelines have been provided for the acquisition of sites and building of schools which are among the major recommendations of the public facilities report. Specific proposals have also been made with respect to public utilities, such as the storage tank in southeast Helena, the interconnections of the water distribution system, and the acquisition of a site for a sanitary landfill. These elements and the proposals that will come out of a subsequent parks and playgrounds plan should be included in a capital improvements program.

A capital improvements program includes an analysis of the present financial resources of a community, and the way that the city uses such resources. Where possible, additional financial resources (including those from federal grant programs) are proposed. The capital improvements proposed in various parts of the comprehensive plan are listed in a capital needs list. Then, together with the city officials, priorities in each of the areas of public improvements, such as streets, playgrounds and utilities are resolved, the most important improvements being listed as the highest priority. Cost estimates are developed for the higher priority projects of the capital needs list. Finally, a program listing, for each year, the projects to be financed and the financial resources available for that year, are translated into a capital improvements program. An important element of the capital improvements program is the coordination of various public improvements, so that, for instance, a street surface is not improved and then later torn up for the installation of utilities. The capital improvements program is thus a program for financing the most urgently need capital improvements in the city or county.

It is recommended that in a subsequent phase of the planning program a capital improvements program for Helena and Lewis and Clark County be prepared.

Guidelines for Study and Administration

Helpful suggestions for plan implementation can only be suggested in general terms, but these will also be suggestive of other ideas along similar lines.

The City-County Planning Board, as advisor to the legislative bodies, must be alert to changes in the community and must continually relate what happens in the community to the guidelines which are provided in the comprehensive plan. It must be observant and recognize changes as they take place and apply value decisions to them. The Board must not only consider if such changes are good or bad, but do something about them in a way that will help to prevent future problems.

The Planning Board should be continuously thinking of ways to implement plans. It should, by becoming informed about innovations and developments in planning, adopt a set of policies to direct the most desirable types of development, such as planned unit residential development, new designs in shopping centers, and the latest wrinkles in planned industrial districts. It should recognize opportunities to implement plans and initiate action to seize them. For example, knowledge about the availability of land that is planned for public improvements, such as streets, schools, or parks, should spark action toward its acquisition.

The Board should set out to keep itself informed about what is being done in other cities. Meetings of the Association of City-County Planning Boards, though not frequent enough, should be attended and reported. A number of planning organizations publish periodicals which, in addition to discussing the latest planning developments in other cities, provide listings of planning publications which are often available free of cost.

The city and county legislative bodies should encourage and make use of their Planning Board. Wherever questions arise about items, such as street dedications or vacations, new subdivisions, or proposals for parks or public works, which

relate to the physical development of the city or county, they should be referred to the Planning Board for consideration and comment. The Planning Board should be brought into policy discussions wherever they seem pertinent to planning or development. The school district officials and the Planning Board should also confer whenever problems of common interest arise. All agencies concerned should agree upon a policy toward joint use of facilities as a way to provide a maximum of service to the people at most economical cost.

The City-County Planning Board has three basic functions: to prepare plans, to keep them up to date from time to time, and to advise the legislative bodies in their implementation. The current planning program and the subsequent phases of the program will fulfill the function of initial planning. The amount of work performed in this program by the municipal officials, and the thought given to the elements of this plan by the City-County Planning Board, in their many hours of hard work, is to be commended.

The comprehensive plan should be regarded not as completing a phase of activity, but the beginning of an improvement program. It is a guide to many actions, and points the way to activities both by citizen groups and by official agencies. To benefit by it, the people of Helena should use it as a guide to action. Everybody in Helena wants a better community. It remains to be seen what will be done to achieve it.

APPENDIX A

CHINA LAND USE CLASSIFICATIONS

1995

CHINA LAND USE CATEGORIES	TABULATED LAND USE CATEGORIES	HAFSA LAND USE CATEGORIES
RESIDENTIAL	Single Family Two Family Apartment Other Residential	Single Family Two Family Apartment Other Residential Group Quarters Trailer, Permanent Mobile Homes Transient Lodgings
INDUSTRIAL	Manufacturing Transportation, Communication, and Utility	Manufacturing, Non-Storage Manufacturing, Storage Motor Vehicle Transport, Aircraft Transportation Communication Electric Utility Gas Utility Water Utility Sewage Disposal Refuse Dump and Incinerator
COMMERCIAL	Trade and Services Automotive Parking	Wholesale Salesrooms Wholesale Storage Retail Automotive, Boat, and Aircraft Sales Commercial, Personal, and Professional Serv. Repair and Contract Construction Storage Commercial Recreation Activities & Theaters

APPENDIX A

HELENA LAND USE CLASSIFICATIONS

1965

MAJOR <u>LAND USE CATEGORIES</u>	TABULATED <u>LAND USE CATEGORIES</u>	MAPPED <u>LAND USE CATEGORIES</u>
RESIDENTIAL	Single Family Two Family Apartment Other Residential	Single Family Two Family Apartment Other Residential Group Quarters Trailer, Permanent Mobile Homes Transient Lodgings
INDUSTRIAL	Manufacturing Transportation, Communication, and Utility	Manufacturing, Non-Storage Manufacturing, Storage Motor Vehicle Transport. Aircraft Transportation Communication Electric Utility Gas Utility Water Utility Sewage Disposal Refuse Dump and Incinerator
COMMERCIAL	Trade and Services Automotive Parking	Wholesale Salesrooms Wholesale Storage Retail Automotive, Boat, and Aircraft Sales Commercial, Personal, and Professional Serv. Repair and Contract Construction Storage Commercial Recreation Activities & Theaters

HELENA LAND USE CLASSIFICATIONS (Continued)

MAJOR LAND USE CATEGORIES	TABULATED LAND USE CATEGORIES	MAPPED LAND USE CATEGORIES
PUBLIC AND QUASI- PUBLIC	Schools Other Public and Quasi-Public	Schools Government Religious Hospital Cultural Public Assembly
STREETS, HIGHWAYS AND ALLEYS	Streets, Highways, Alleys	Streets, Highways, Alleys
RAILROAD RIGHT-OF- WAY	Railroad Right-of- Way	
OPEN SPACE	Public Open Space Other Open Space	Recreation Activity Public Park Cemetery Golf Course Private Open Space
UNDEVELOPED LAND	Agricultural Vacant Land	General Farming Pasture Agriculture Related Vacant Land

APPENDIX B

LAND USE ANALYSIS OF AREAS WITHIN HELENA

In order to analyze the interrelationships between land uses in Helena, the Land Use data were tabulated separately for nine sub-areas within the city (Table B-1). These "Analysis Areas", shown on Figure B-2, correspond to those developed in the previous Master Plan for Helena.

1. Northwest Helena

This area is typical of the outlying residential areas. In the future, substantial residential growth will probably occur in the Sunhaven Addition. This growth will create demand for some local commercial facilities, which should be provided for in the comprehensive plan.

2. Golf Course

At the present time, the golf course area consists primarily of open space and residential uses. The area is split in the center by the tailings left from early strip mining. This presently unused land could provide for future residential use and golf course expansion.

3. Carroll College

This area contains only a small amount of vacant urban land (10 percent). Carroll College occupies one-third of the land area, and the railroad right-of-way takes up another third. The portion of this area now owned by the railroad is not suitable for residential use and should be reserved for other purposes.

4. Airport Area

This area contains a mixture of many types of land uses. The southern portion contains many light industries which are now separated from the residential area by the railroad right-of-way. Because additional similar development is expected to occur along the railroad, a buffer zone should be provided between this and the residential area.

Most of the northern portion of the area is located in the airport approach zone. Because of the noise and hazard of low flying aircraft, it is recommended that this land be reserved for open space.

5. High School Area

The high school area also contains a mixture of many types of land uses. In the northern and southern portions, residences exist in close proximity to commercial and industrial areas. In the future, attempts should be made to distinctly separate these conflicting types of land uses. Zoning controls should be strengthened to assure orderly development in this area.

6. Capitol Area

The Capitol Area of Helena contains the largest proportion of residential land. Even though this area is rapidly reaching the saturation or maximum population level, substantial new growth is expected along the hill and to the east. Care should be taken to preserve the beauty of the Capitol and the area surrounding it.

7. South Helena

Many CBD fringe or transitional commercial uses are contained in the western portion of South Helena. Also included are about one-third of all the multi-family dwellings in Helena. The development pattern indicates that these are scattered between the CBD and the Capitol to the east, with the greatest concentration west of Davis Street. Little control has been exercised in the location of these land uses. Because most of the vacant land there consists of steep slope, little new development is expected.

8. Southwest Helena

Southwest Helena's pattern of development is similar to that of South Helena. It contains a major portion of the CBD as well as the transitional commercial uses to the west of it. The same precautions should be taken to control encroachment of these transitional uses as in the preceding area. Less commercial zoning would help to prevent further problems.

9. Central Area

This area contains the largest amount of commercial area as a percent of total developed area. The commercial development is scattered along the major thoroughfares which travel through and by the area. Because this area has virtually no vacant land left, the only new uses that will occur will replace existing uses. The question is whether this should be allowed to happen haphazardly or through a planned public policy orientation.

Table B-1

Existing Land Use in Helena--1965
by Analysis Area
(000's of Sq. Ft.)

	1 Northwest Helena		2 Golf Course		3 Carroll College		4 Airport Area		5 High School	
Land Use	Area	%	Area	%	Area	%	Area	%	Area	%
Residential	4,706	29.5%	1,385	15.9%	336	5.2%	2,451	14.6%	2,723	28.1%
Commercial	481	3.0	658	7.5	-	-	980	5.9	1,349	14.0
Industrial	66	.4	-	-	425	6.6	246	1.5	148	1.5
Public and Quasi-public	994	6.2	296	3.4	2,607	40.5	274	1.6	782	8.1
Streets, Highways and Alleys	6,000	37.7	2,000	22.8	400	6.2	6,800	40.5	4,200	43.4
Railroad Right-of-Way	3,050	19.2	900	10.1	2,550	39.7	5,800	34.6	300	3.1
Open Space	630	4.0	3,527	40.3	115	1.8	224	1.3	176	1.8
Total Developed	15,927	100.0%	8,766	100.0%	6,433	100.0%	16,775	100.0%	9,678	100.0%
Agricultural	-	-	110	-	-	-	2,349	-	73	-
Vacant Land	12,583	-	13,351	-	721	-	16,463	-	6,511	-
Total Land Area	28,510	-	22,227	-	7,154	-	35,587	-	16,262	-
	6		7		8		9		10	
Land Use	Capitol Area Area	%	South Helena Area	%	Southwest Helena Area	%	Central Area Area	%	Helena--Total Area	%
Residential	6,942	48.1%	7,882	43.5%	8,680	42.1%	4,752	37.0%	39,857	32.2%
Commercial	354	2.5	838	4.6	1,841	8.9	1,627	12.7	8,128	6.6
Industrial	8	.1	240	1.3	310	1.5	182	1.4	1,625	1.3
Public and Quasi-public	1,027	7.1	870	4.8	605	2.9	695	5.4	8,150	6.6
Streets, Highways and Alleys	5,900	40.8	8,200	45.3	8,200	39.8	3,700	28.8	45,400	36.7
Railroad Right-of-Way	-	-	-	-	550	2.7	1,150	9.0	14,300	11.6
Open Space	201	1.4	82	.5	435	2.1	735	5.7	6,125	5.0
Total Developed	14,432	100.0%	18,112	100.0%	20,621	100.0%	12,841	100.0%	123,585	100.0%
Agricultural	20	-	289	-	6	-	-	-	2,847	-
Vacant Land	17,650	-	26,431	-	27,165	-	2,885	-	123,760	-
Total Land Area	32,102	-	44,832	-	47,792	-	15,726	-	250,192	-

LAND USE ANALYSIS AREAS

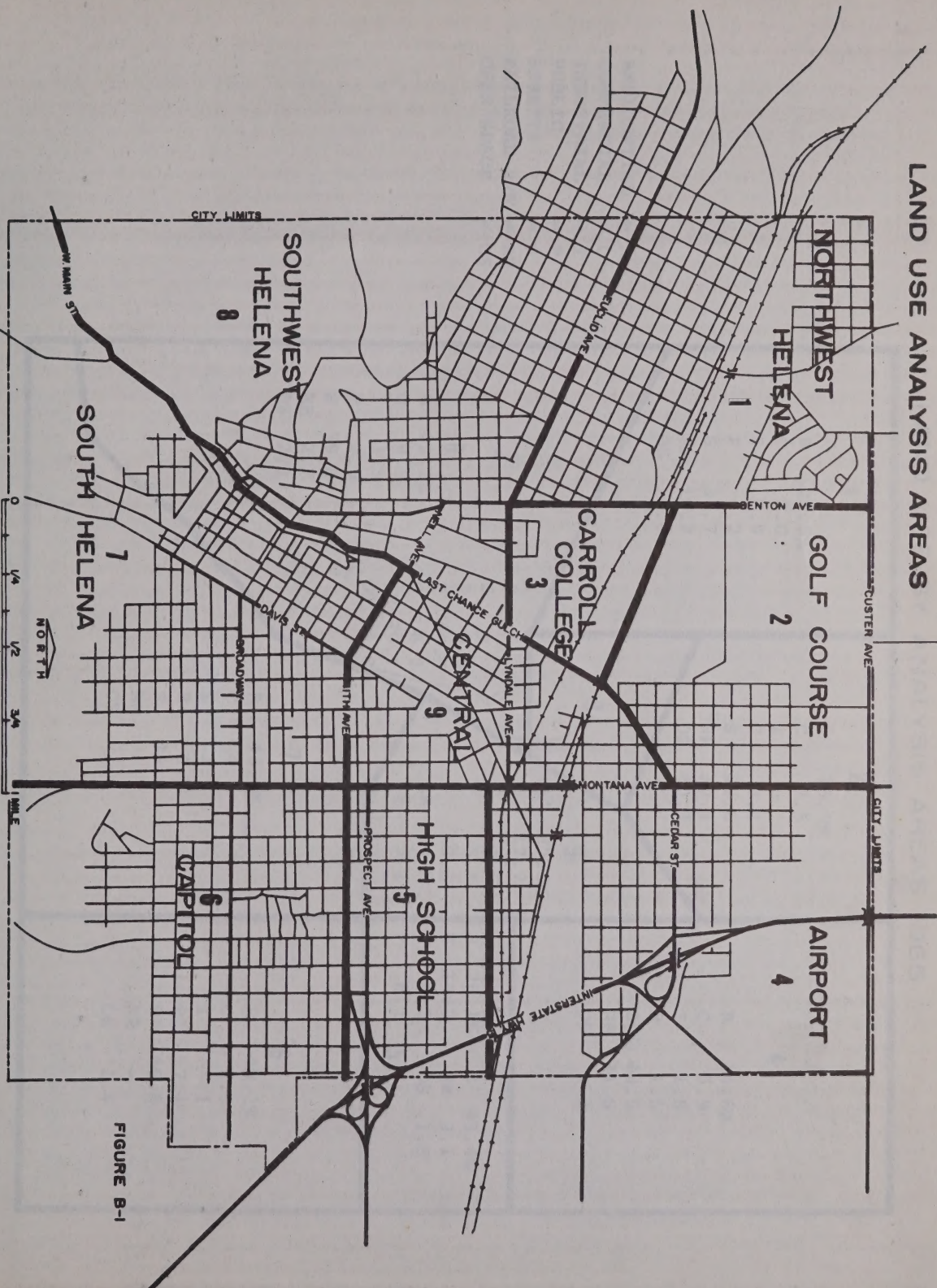
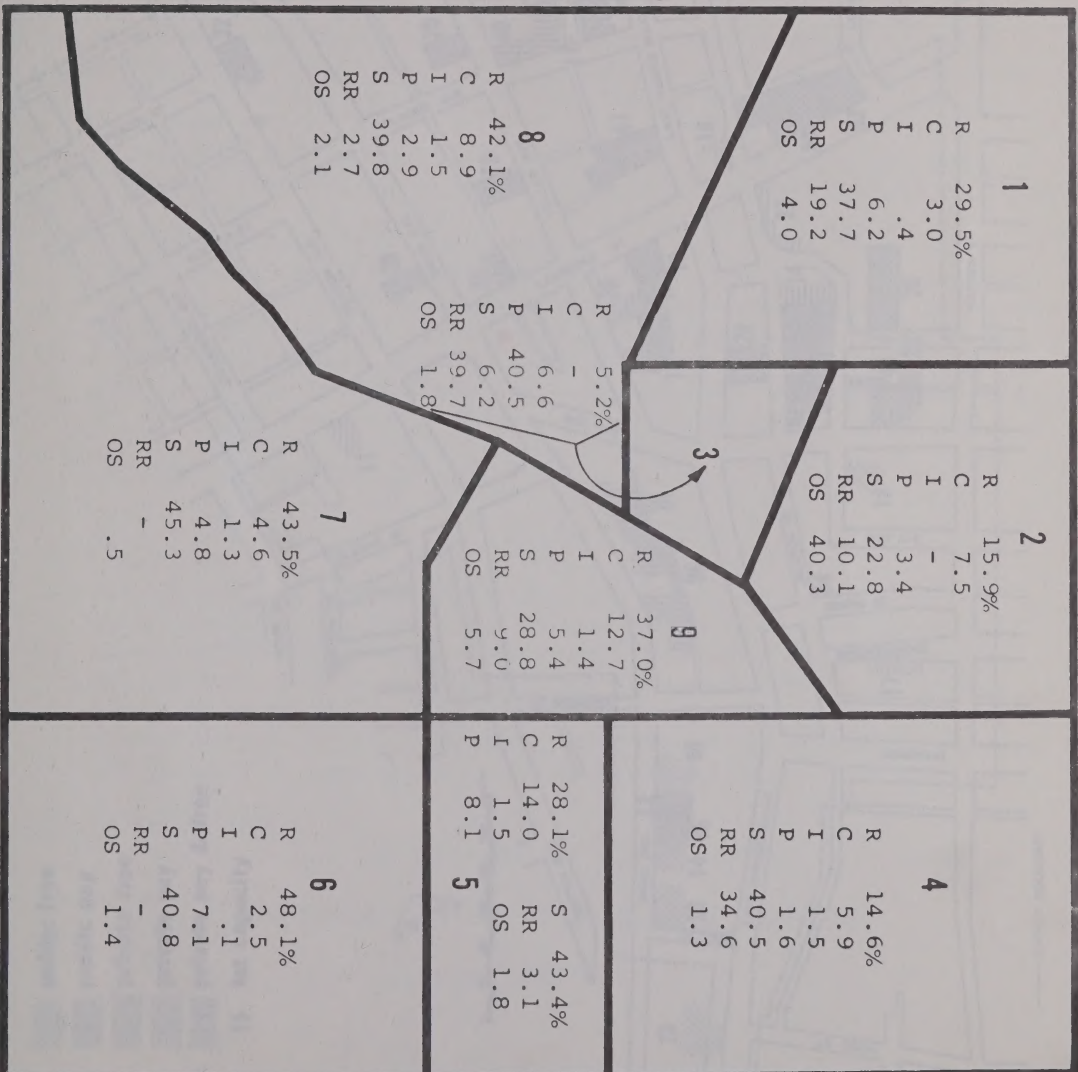


FIGURE B-1

LAND USE BY ANALYSIS AREAS 1965

RESIDENTIAL = R
 COMMERCIAL = C
 INDUSTRIAL = I
 PUBLIC = P
 STREETS = S
 RAILROAD R/W = RR
 OPEN SPACE = OS



THE DOWNTOWN PARKING SURVEY AND ANALYSIS

APPENDIX C

Introduction

The provision of adequate off-street parking is an important aspect of the stabilization of the central business district's position as Helena's primary commercial area. A central retail and service area with great parking inadequacies cannot hope to remain a viable area if competing areas have an abundance of adjacent free parking, good access and circulation patterns, and approach the range of goods and services offered by "downtown."

Parking Inventory

In order to see what changes have taken place in the provision of off-street parking for the central area, an inventory of off-street parking was made in 1965 and compared to the survey of July 1960. The 1960 survey was conducted by the Planning Survey Division of the Montana State Highway Commission in cooperation with U. S. Department of Commerce, the Bureau of Public Roads, and the city of Helena.

Figure C-1 shows off-street parking in 1960 and figure C-2 shows off-street parking in 1965. The area is the same for both surveys.

In comparing the 1960 and 1965 surveys of off-street parking, the following considerations must be kept in mind:

1. A number of off-street parking areas included in the 1965 survey were not included in 1960. This exclusion resulted either from oversight or for some other reason not given in the 1960 text. Approximately 210 spaces, nearly half the increase in off-street parking, were spaces existing in 1960, but uncounted. These lots are included in figure C-1. Examples of lots omitted in 1960 are: The employee lot behind the medical clinic on Fuller Avenue, between Neill Avenue and Lawrence Street (19 spaces), and the employee parking area on the Central School grounds (estimated at 30 spaces).

HELENA OFF-STREET PARKING SURVEY NOVEMBER, 1965

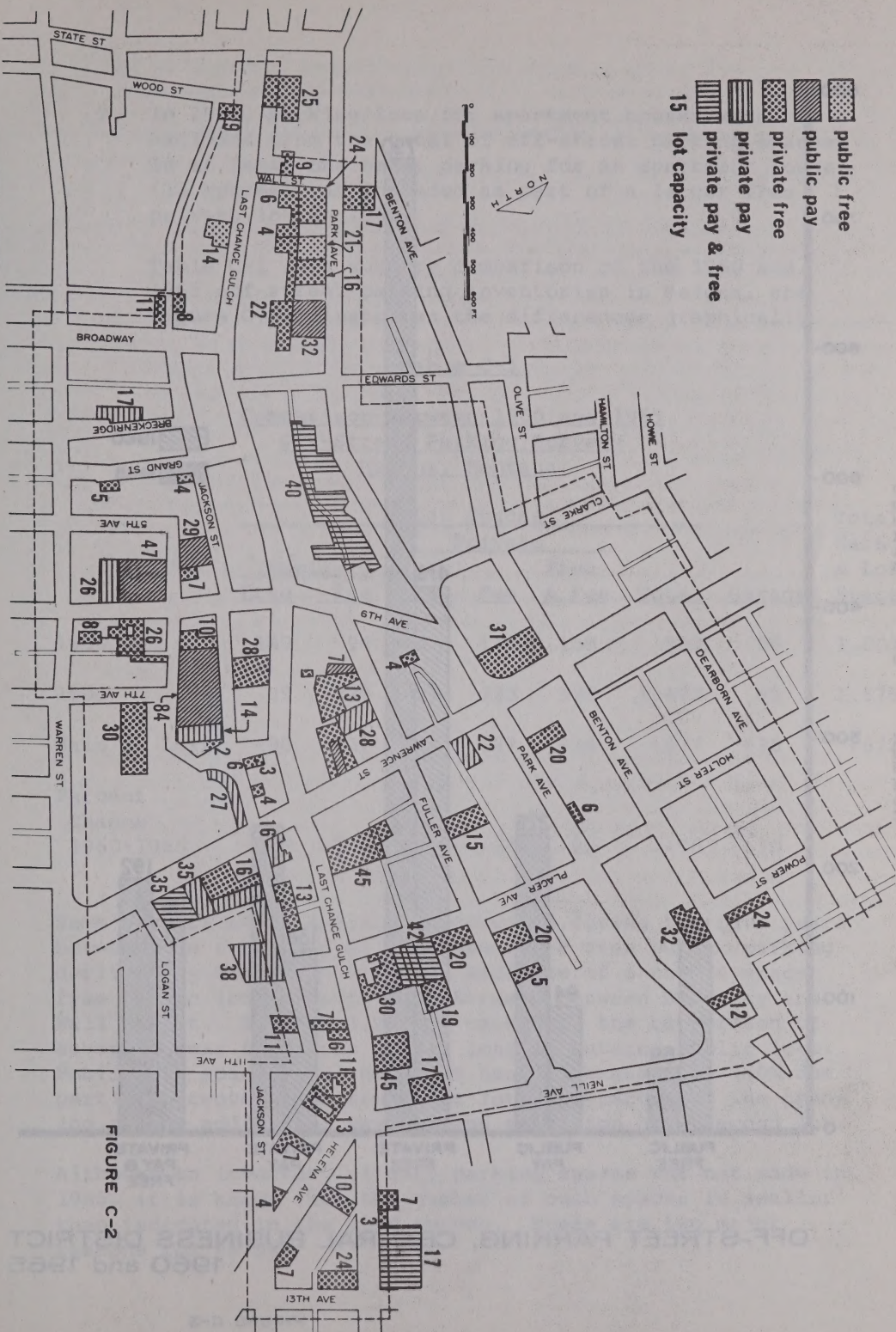
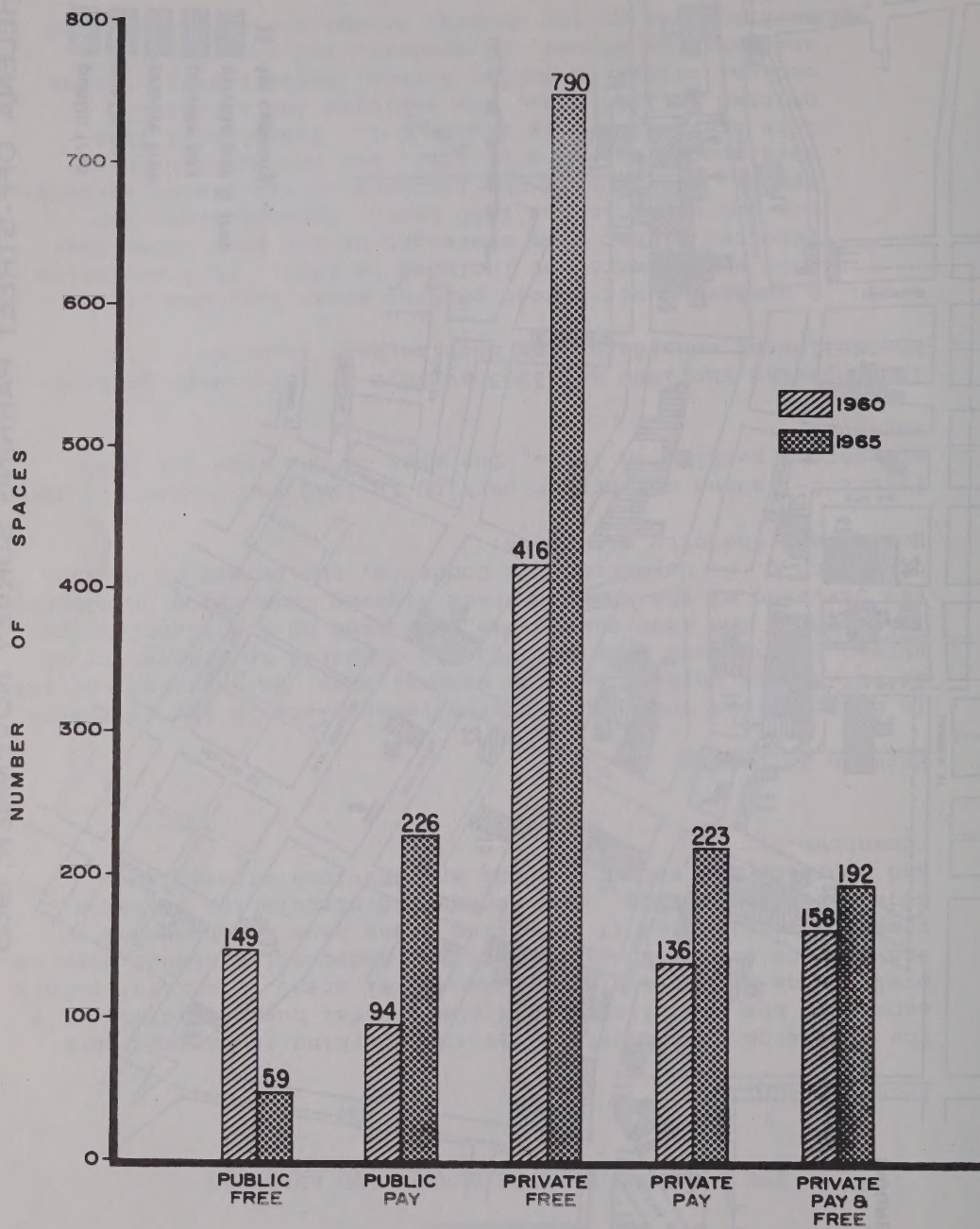


FIGURE C-2



OFF-STREET PARKING, CENTRAL BUSINESS DISTRICT
1960 and 1965

2. In 1965, parking lots for apartment houses were excluded from the total of off-street parking spaces. In at least one case, parking for an apartment house (12 spaces) was included as part of a larger free private lot in 1960.

Table C-1 is a summary comparison of the 1960 and 1965 off-street parking inventories in Helena, and figure C-3 illustrates the differences graphically.

Table C-1

Comparison Between 1960 and 1965
Off-Street Parking Surveys
Helena, Montana

	Lot Spaces						Garage	Total Garage & Lot Spaces
	Public		Private					
	Free	Fee	Free	Fee	Free & Fee	Total		
1960	149	94	416	136	158	953	50	1,003
1965	59	226	790	223	192	1,490	85	1,575
Gain or Loss	-90	+132	+374	+87	+34	+537	+35	+572
Percent Change								
1960-1965	-60	+140	+90	+64	+22	+56	+70	

Some significant changes have occurred during the five years between the two surveys. The amount of free public parking declined by 60%, even with the addition of a new 14-space free public lot on South Main Street, between Broadway and Wall Street. This decline was caused by the conversion of several areas from free public lots to metered public lots. Public pay spaces, on the other hand, increased by 140% due partly to conversions from free lots and partly to the opening of one additional pay lot and expansion of a second lot.

Although an inventory of curb parking spaces was not made in 1965, it is known that the number of curb spaces is smaller than indicated in the 1960 survey. There are two major reasons for this:

1. Several streets which had unrestricted parking in 1960 are now metered and metered parking spaces take more footage per car than unrestricted parking.
2. The number of unrestricted spaces was overestimated in the 1960 report. Actual counts of the cars parked along unrestricted streets in 1965 indicate that fewer cars can actually park along the curb than the number of spaces shown in 1960.

Comparison of the two surveys reveals a definite increase in parking space in the CBD area. However, it should be noted that the 1,200 free parking spaces provided at the Capitol Hill shopping center alone approach the entire number of parking spaces available downtown, most of which are fee parking spaces.

Future Parking Provisions

Helena needs to plan a total parking system for the central business district. The provision of a few more downtown lots will not suffice. A proper system will include: the correct number of spaces convenient to both the circulation system and driver destinations; sound financing; proper maintenance; effective administration; proper time limits; an adequate public information program; and sound law enforcement. Financing could be furnished in part by the CBD property owners, with a local improvement district as one approach to the problem. Another approach might be to allocate income, now credited to the city's general fund, from present metered parking to a special fund which would be used for parking meter costs, maintenance, enforcement, and the acquisition and development of public off-street parking lots, properly located, in the CBD.

The proposed zoning ordinance requires off-street parking for all new construction in Helena, including the central business district. As proposed, the requirements for uses that may occur in the CBD are:

1. Libraries, Art Galleries and Museums

Two spaces for each 1,000 square feet of floor area.

2. Public Utility and Public Service Uses

One space for each three employees, plus five spaces for public use.

3. Restaurants, Bars, Cafeterias, or other eating and drinking places

One space for each 200 square feet of floor area.

4. Furniture and Appliance Stores, repair shops for household equipment, and Radio and Television and Machinery sales and repair establishments

One space for each 400 square feet of floor area.

5. Hotels and Motels

One space for each room for ~~rent~~, plus one space for each five employees.

6. Retail Sales stores, Personal Service establishments, Shoe Repair, Barber and Beauty shops, etc.

One space for each 200 square feet of floor area.

7. Theaters and Auditoriums

One space for each four seats.

8. Banks, Business or Professional Offices and Office Buildings

One space for each 400 square feet of floor area.

Design standards for off-street parking in the proposed zoning ordinance also allow for property owners to provide joint off-street parking facilities for a number of activities in common, as long as they meet the total requirements for off-street parking.

In Helena, with its lack of public transportation, there is need for a parking plan for the central business district. However, a parking plan is itself only one aspect of a total downtown plan, and the mere provision of additional parking space will not solve the downtown area's problems.

APPENDIX D

ENROLLMENT FORECASTS

As a first step, the Helena public school enrollment forecasts to 1970, developed by the school district administration,* were reviewed. These forecasts were based on the average rate of survival for each grade level over the past ten years. Because of what appear to be calculation errors, the school district projections were overstated, particularly in the junior high grades. Using the same survival rate technique, more conservative independent forecasts were developed.

All enrollment forecasts which are generated from past survival rates are heavily dependent upon "reasonable" projections of the number of five-year-olds, as well as projections of school age children. Therefore, using the data on page 2 of the school district forecast report*, the survival rate technique was applied to children under the age of five.

The ten year average survival rate for each grade level, in combination with the pre-school survival rates, allowed a projection of public school enrollment to the year 1970-71. These projections are shown in table D-1.

Helena public school enrollment is expected to increase slightly each year to a 1970-71 high of 6,070 students. The major portion of this growth will result from increases in grades 1-6, while enrollment in grades 7-12 is expected to remain relatively constant over the forecast period. This is consistent with enrollment patterns in other cities of comparable size with similar growth potential.

It should also be noted that there is an average fluctuation of 385** pupils between the total enrolled and the number enrolled at the end of the year, for the years 1956 to 1965. Most states utilize figures representing a point in time, October 1, for their statistical data or enrollment, but the fluctuation, which may be as much as 10% of the total enrollment, is an important consideration.

(*) Serrette, William, Report Projecting Future School Enrollments the Helena Public Schools; July, 1964.

(**) Data provided by Superintendent of Schools, Feb. 28, 1966.

Table D-1

School Enrollment Projections, Helena, Montana

	Enrollment		Projections				
	1964-5*	1965-6**	1966-7	1967-8	1968-9	1969-70	1970-71
5-year-olds the year before	497	527	537	566	563	536	525
Grade 1	519	489	547	556	587	584	556
2	455	437	476	532	541	571	568
3	406	425	431	469	525	533	563
4	402	411	425	431	469	525	533
5	458	409	414	428	434	472	528
6	405	446	406	411	425	431	468
7	419	456	501	456	461	478	484
8	444	437	459	505	459	464	481
9	438	500	466	489	539	490	495
10	438	452	489	455	478	527	479
11	400	449	420	454	423	444	490
12	429	409	430	402	435	405	425
Total 1-12	5,251	5,368	5,464	5,585	5,776	5,924	6,070
* June, 1965							
** September, 1965							
Grades 1-6	2,671	2,648	2,699	2,827	2,981	3,116	3,216
7-9	1,313	1,410	1,426	1,450	1,459	1,432	1,460
10-12	1,267	1,310	1,339	1,311	1,336	1,376	1,394
1st grade as % of total	9.9	9.1	10.0	10.0	9.8	9.9	9.2

Table D-2

School Enrollment Projection - 1970-1975-1980-1985

	<u>Actual Enrollment</u>				<u>Projected</u>
	<u>1950-51</u>	<u>1955-56</u>	<u>1960-61</u>	<u>1965-66</u>	<u>1970-71</u>
Grades 1-6	1,572	1,952	2,472	2,626	3,216
7-9	775	926	1,198	1,397	1,460
10-12	<u>661</u>	<u>709</u>	<u>971</u>	<u>1,351</u>	<u>1,394</u>
Total (1-12)	3,008	3,587	3,645	5,374	6,070

	<u>Enrollment Percent Increase</u> <u>5-year Periods</u>				<u>Projected</u>
	<u>1950-55</u>	<u>1955-60</u>	<u>1960-65</u>	<u>1965-70</u>	
Grades 1-6	24.1	26.6	6.2	22.5	
7-9	19.5	29.4	16.6	4.5	
10-12	7.3	37.0	39.1	3.2	
Total (1-12)	19.2	29.5	15.7	13.0	

	<u>Enrollment</u> <u>Percent Increase by Decades</u>			<u>Projected</u>
	<u>1950-60</u>	<u>1955-65</u>		<u>1960-70</u>
Grades 1-6	57.2	34.5		30.1
7-9	54.6	50.9		21.9
10-12	46.9	90.6		43.6
Total (1-12)	54.4	50.0		30.7

	<u>Enrollment Projection</u>					
	<u>1975-76</u>	<u>Percent Increase</u>	<u>1980-81</u>	<u>Percent Increase</u>	<u>1985-86</u>	<u>Percent Increase</u>
Grades 1-6	3,580	(11.6)	4,104	(14.6)	4,719	(15.0)
7-9	1,800	(23.6)	2,064	(14.7)	2,373	(15.0)
10-12	<u>1,600</u>	(14.7)	<u>1,832</u>	(14.5)	<u>2,106</u>	(15.0)
Total (1-12)	6,980		8,000		9,200	

Long range enrollment projections to 1985 were based on past enrollment trends as applied to the 1970 forecast. These projected elementary, junior high, and high school enrollments are presented in table D-2. These projections indicate that, from 1965 to 1985, a 71% increase in total public school enrollment can be expected. A comparison with population estimates in table D-3 shows that an increasing share of the total city population will be enrolled in the schools. This is known to be occurring nationally, and is supported by past trends in Helena, although the Helena school district boundary is not identical to the city limits. However, district population trends are not available.

Table D-3

School Enrollment as a Percent of Helena Population

	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1965</u>
Helena				
Population	15,056	17,581	20,227	21,800
Helena				
Enrollment	2,485	3,026	4,645	5,374
School				
Enrollment as	16.5%	17.2%	23.0%	24.7%
Percentage of				
Population				
	<u>Projection</u>			
	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>
Helena				
Population	22,500	24,900	27,200	29,500
Helena				
Enrollment	6,070	6,980	8,000	9,200
School				
Enrollment as	26.5%	28.0%	29.4%	31.2%
Percentage of				
Population				

Parochial Schools

Parochial school enrollment over the past 15 years has averaged 21% of the public school enrollment. Parochial students account

for approximately 1 out of every 5 school children in Helena. Assuming this percentage will remain constant, a total of 1,932 parochial pupils is forecast for 1985 as indicated in table D-4.

Table D-4

Parochial School Enrollment

	<u>1960-61</u>	<u>1961-62</u>	<u>1962-63*</u>	<u>1963-64*</u>	<u>1964-65*</u>	<u>1965-66</u>
Pub. School Enrollment	4,645	4,847	5,177	5,424	5,251	5,374
Parochial School Enrollment	981	1,021	1,083	1,109	1,126	1,145
Parochial Enrollment as percent- age of Pub. Enrollment	21.1	21.1	20.9	20.5	21.4	21.3

Projection

	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>
Public School Enrollment	6,070	6,980	8,000	9,200
Parochial School Enrollment	1,275	1,466	1,680	1,932
Parochial enrollment as percentage of Public Enrollment	21.	21.	21.	21.

(*) 3 years when approximately 70 parochial 1st graders were in public school.

The recent construction of the new Catholic Central High School in Northwest Helena, and the expansion of St. Helena grade school into the old high school space has relieved overcrowding in the parochial schools for the present.

The first grade classes which had been eliminated at St. Helena for the three years from 1962 through 1964 have been resumed. Forecasted enrollments indicate a future need for elementary classrooms. The proposed replacement of St. Marys elementary school by the construction of a new building on a site east of the public high school would take care

of elementary needs to 1985 if it is sufficiently large. The new parochial high school will serve the area adequately until 1985. The site is large enough to take care of any expansion needed to accommodate future enrollment.

As a further check of the "reasonableness" of our forecasts, total public and parochial forecast enrollments for 1970 and 1980 were compared with the number of 0-19 year olds forecast for Lewis and Clark County in the population report.

Table D-5

Helena School Enrollment as a Percentage
Of 0-19 Year Population in Lewis & Clark County

	<u>Actual</u>	<u>Projected</u>	
	<u>1960</u>	<u>1970</u>	<u>1980</u>
Lewis & Clark County population (0-19)	10,963	13,050	15,550
Helena Public and Parochial enrollment	5,626	7,345	9,680
Enrollment as percentage of 0-19 population	51.3%	56.3%	62.3%

The projected increases in the percentage of Lewis & Clark County 0-19 year olds in the Helena district schools seem high, particularly in 1980. However, an increasing proportion of this age group may be expected to attend school in the future. Our projections should be reviewed and updated as new data becomes available. The long range projections will be helpful decision making guidelines in the future, and will serve to indicate the need for school site acquisition and school construction. The school administration should start soon to select and acquire sites for future schools.

of elementary needs in 1970. It is extremely likely that the new population and school will serve the area adequately until 1980. The area is large enough to carry 10,000 and expansion needed to accommodate future enrollment.

As a further check on the "reasonableness" of our forecasts, local public and parochial forecasts for 1970 and 1980 were compared with the number of 0-19 year olds forecast for Lewis and Clark County in the population report.

Table 2-1
Lewis and Clark County

Enrollment Projections as a Percentage of 0-19 Year Population in Lewis and Clark County

	Actual 1960	Projected 1970	Projected 1980
Lewis and Clark County	10,061	11,050	12,350
Population (0-19)	10,061	11,050	12,350
Enrollment	7,075	7,343	8,680
Enrollment as percentage of 0-19 population	70.4%	66.4%	70.4%

The projected increases in the percentage of Lewis and Clark County 0-19 year olds in the Lewis and Clark County area are high, particularly in 1980. However, an increasing portion of this age group may be expected to attend school in the future. Our projections should be revised and updated as new data becomes available. The 1970 census projections will be helpful in determining future trends in the future, and will serve to indicate the need for school site acquisition and school construction. The school administration should work to attract and acquire additional students and to attract and acquire additional students and to attract and acquire additional students.

It is estimated that the Lewis and Clark County area will need about 10,000 additional students by 1980. The Lewis and Clark County area will need about 10,000 additional students by 1980. The Lewis and Clark County area will need about 10,000 additional students by 1980.



Lewis & Clark Library
120 S. Last Chance Gulch
Helena, MT 59601



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